KV-X2121D
RM-673

SERVICE MANUAL

AEP Model

Chassis No. SCC-B14S-A

AE-1 CHASSIS

Note: The service manual for RM-673 has been issued separately.

MODELS OF THE SAME SERIES	
KV-X2121D	KV-X2521D
KV-DX21TD	KV-DX27TD
KV-X21TD	KV-X25TD

SPECIFICATIONS

Television system	CCIR B, G and H
Color system	PAL, SECAM, NTSC$_{3.58}$, NTSC$_{4.43}$
Stereo system	German two-carrier system
Channel coverage	VHF channels E2 – E12 UHF channels E21 – E69 Cable TV channels S1 – S20 (A total of up to 30 preselected channels)
Picture tube	Trinitron tube 100-degree deflection Approx. 54.5 cm (21 inches) (Approx. 51 cm picture measured diagonally)
Inputs	21-pin connector : CENELEC Standard 21-pin connector : RGB input unconnected
Outputs	Headphones jack : stereo minijack External speaker terminals : 2-pin DIN Audio output jack : phonojack output level dependent upon TV setting

Power consumption	82 Wh
Dimensions	Approx. 519 × 471 × 463 mm (w/h/d)
Weight	Approx. 26 kg
Supplied accessories	RM-673 Remote Commander (1) IEC designation R6 batteries (2)
Audio output	10 W + 10 W (music power)

Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

1−1. FIRST OF ALL

1 **Connect the aerial to the ⌉⌈ socket on the rear of the set.**
This socket receives the standard 75-ohm aerial plug.
2 **Plug in the set.**
3 **Tune in the available channels.**

Use the buttons inside the panel. To open the panel, push the center.

To tune in all channels automatically :
1 Press ◇ (preset).
2 Press PROGR to select the program position from which tuning is to start.
3 Press ◇ (auto programing).

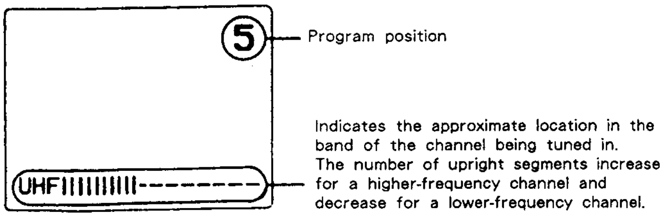
The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in step 2.
When tuning has been completed, the set returns to the position where tuning began.

To tune in a channel in any desired program position.
(e. g. the position which the same number as the channel) :
1 Press ◇ (preset).
2 Press PROGR to select the desired program position.
3 Press C (clear).
4 Press ⊞ (search) repeatedly until the desired channel appears.
5 Repeat steps 2 to 4 for all channels, if required.
6 Press ◇ (preset) again.

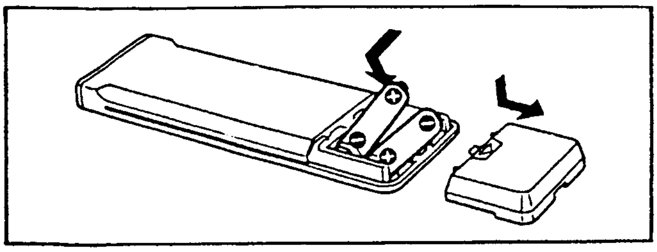
If the set is to be used in an area with poor reception, preset the program numbers between 1 and 19 for TV program use.

To have the unused program positions skipped when PROGR+ or PROGR− is pressed
1 Press ◇ (preset).
2 Press PROGR to select the unused position.
3 Press C (clear).
4 Repeat steps 2 and 3 for all unused position.
5 Press ◇ (preset) again.

On-screen display while tuning

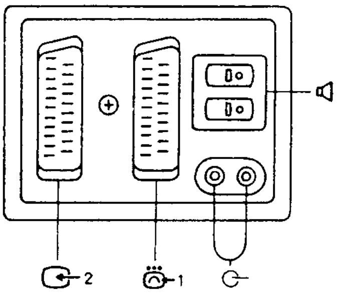

5
Program position
UHF IIIIIIIII--------
Indicates the approximate location in the band of the channel being tuned in.
The number of upright segments increase for a higher-frequency channel and decrease for a lower-frequency channel.

4 **Insert two R6 batteries checking the correct polarity.**



1−2. CONNECTING OTHER EQUIPMENT

Connectors on rear set



L/G/S	Left external speaker terminal (2-pin DIN)	Connect to external speakers. The TV speakers will be disconnected. speakers 8−16 Ω
R/D/D	Right external speaker terminal (2-pin DIN)	
R/D/D	Right audio output jack (phono jack)	Connect to audio equipment. When only using the phonojacks, two loudspeaker plugs, (DIN 41529) should be insarted into the extemal speaker terminals so that the TV spaker output is switched off.
L/G/S	Left audio output jack (phono jack)	
⊖-1	21-pin connector (CENELEC standard)	Connect to a VTR micro computer, etc. The picture of the TV channel being received is always output. The picture of ⊖-2 can be watched whlle recording a TV program with the VTR connected to ⊖-1.
⊖-2	21-pin connector (without RGB input)	Connect to second VTR. The picture displayed on the screen is always output. The picture of ⊖-1 can be recorded with the VTR connected to ⊖-2 while monitaring the picture.

VTR operation using the supplied Commander

Remote operation of the VTR is limited to the features and functions of the VTR. For further details, refer to the VTR manual.
When watching a video with the VTR connected to the ⌉⌈ connector, set the channel for the video to the program number 0 or any empty channel between 20 and 29.

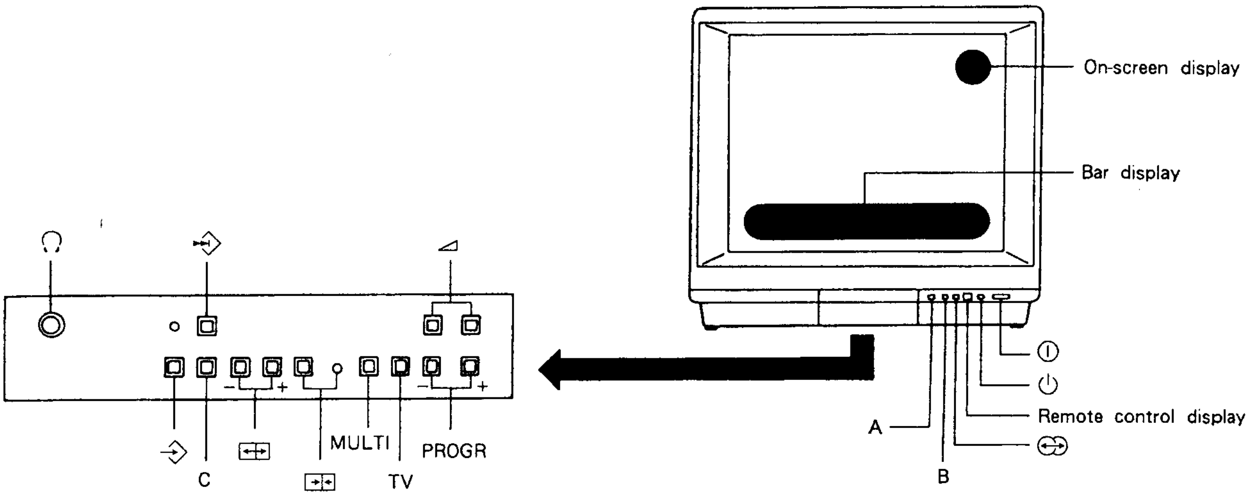
Note
Move the VTR away from the TV, if the picture or sound is distorted.

21 pin connector (⇦1, ⇦2)

Pin No.	⇦1	⇦2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm*
2	○	○	Audio input B (right)	Standard level : 0.5 Vrms Input impedance : More than 10 k ohms*
3	○	○	Audio output A (left)	Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level : 0.5 Vrms Input impedance : More than 10 k ohms*
7	○	●	Blue input	0.7 V ±2 dB, 75 ohms, positive
8	○	○	Function select (AV control)	High state (9.5−12 V) : Part mode Low state (0−2 V) : TV mode Input impedance : More than 10 k ohms Input capacitance : Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green/Green with sync input	Green signal : 0.7 V ±2 dB, 75 ohms, positive Green with sync signal : 1 V ±2 dB, 75 ohms, positive
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	●	Red input	(Same as Pin 7)
16	○	●	Blanking input (Ys signal)	High state (1−3 V) Low state (0−0.4 V) Input impedance : 75 ohmes
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1 V ±2 dB, 75 ohms, positive Sync : 0.3 V (−3, ±10 dB)
20	○	○	Video input	1 V ±2 dB, 75 ohms, positive Sync : 0.3 V (−3, ±10 dB)
21	○	○	Common ground (plug, shield)	

* at 20 Hz−20 kHz ○ connected ● unconnected (open)

1−3. FUNCTION OF CONTROLS



On the set

On-screen display
Indicates program numbers and ⊖ input modes.

Bar display
Indicates the level of ◁ volume, ⊛ color, ☼ brightness, ◐ contrast, 𝄢 bass, 𝄞 treble and ▷◁ balance.

Note on ▷◁ function.
When the volume is at the minimum setting the balance ▷◁ function will not operate.

① Power switch
To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operation of the set.

Note
To ensure correct operation, push the switch in fully.

⏻ standby indicator
Lights up brightly when the set is in the standby mode.

Note
If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

⊖ space sound indicator
Lights up when ⊖ on the Remote Commander is pressed.

A/B indicators
One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)
Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for both channels.

Remote control detector
Point the Remote Commander towards this detector.

Inside the panel

∩ headphones jack (stereo minijack)

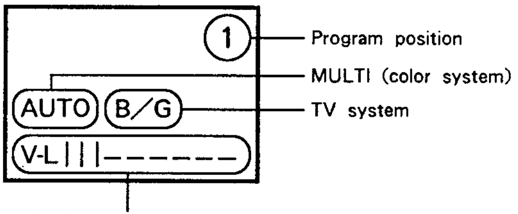
⊞ SEARCH buttons
Press to fine tune a weak channel manually, if required. When ⊞ is pressed, the ⊡ indicator (AFT) goes off and the AFT cricuit does not function on the selected channel. To restore the ⊡ AFT circuit on this channel, press ⊡ (AFT) so that the indicator lights up.

⊡ AFT button and indicator
Normally, press ⊡ so that the indicator lights up.
The AFT circuit automatically fine tunes the channel for the best possible picture.

◁ volume buttons

PROGR+, PROGR− program scan buttons

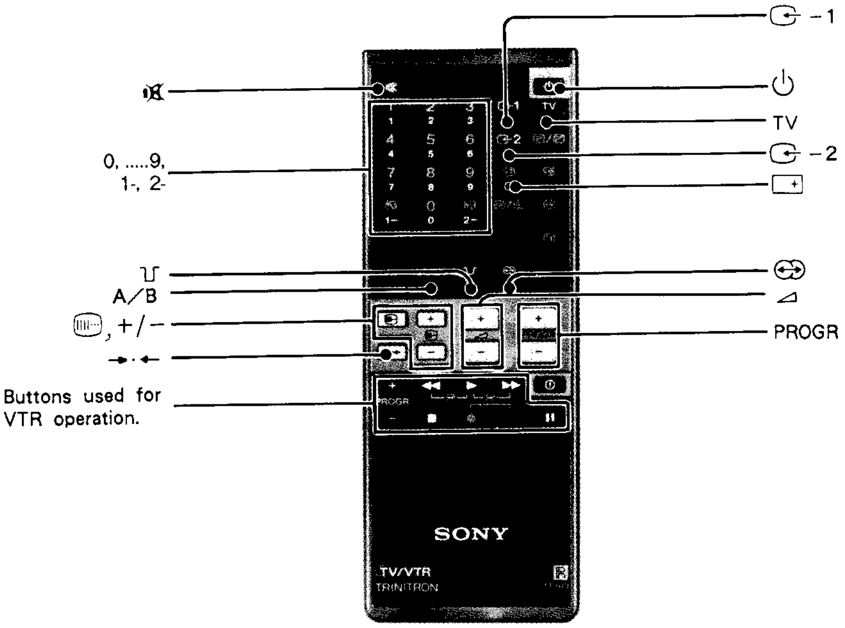
On-screen display during presetting



Indicates the approximate location in the band of the channel being tuned in.
"V-L" : low VHF band, "V-H" : high VHF band, "UHF" : UHF band.
The number of upright segments increases for a higher-frequency channel.

Each time TV button is pressed, the following indications appear in this order.
B/G : West European TV standard
I : British TV standard
M : American TV standard
D/K : East European TV standard
L : French TV standard

Each time MULTI button (COLOR SYSTEM) is pressed, the following indications appear in this order.
AUTO ; NTSC3.58 ;
Normally set to the AUTO position. The available color system is selected automatically.



RM-673

On the Remote Commander

To operate the Commander, point it toward the remote control detector.

🔇 mute button

0, ..., 9, 1-, 2- buttons
To tune into :
program 15, press 1- and 5.
program 25, press 2- and 5.

A/B button
Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

▥, +/− analogue select buttons
Press ▥.
◑ will appear on the screen. Adjust by pressing + or −. Press ▥ again and adjust ⊛ (color), then ☼ (brightness), 𝄢 (bass), 𝄞 (treble) and ◺◢ (balance).

→•← reset button
Press to reset color, contrast and brightness to factory-set levels.

⏻ standby button
Press to change to the standby mode. Use this button to turn off the set for short periods of time.
To turn on the set, press TV or the program number ; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

TV button
Press to change to the TV mode from standby, ⊖ input or teletext modes.

⊖1 input button
Press to view the input picture coming in through the ⊖-1 connector.
"⊖1" lights up on the screen.
Press TV or the program number to return to the TV mode.

⊖2 input button
Press to view the input picture coming in through the ⊖2 connector.
"⊖2" lights up on the screen.
Press TV or the program number to return to the TV mode.

⊞ on-screen display button
Press to make the display appear on the screen.
Press again to make it disappear.

Ʊ loudness button
Press to emphasize high and low notes.

⊜ space sound button
Press to obtain special acoustic effects.

◢ volume buttons

PROGR program scan buttons

Note
Buttons not referred to on this page or next page do not operate.

1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Operation

1 Select the TV channel for the desired teletext service.
2 Press ▤/▨ (TEXT/MIX) to display the teletext service.
Once ▤/▨ has been pressed, the TV channel cannot be changed.
3 Key in the three digits for the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then re-enter the correct page number.
The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletext service can be displayed directly from the standby mode, by pressing ▤/▨.

To receive the teletext service of a different TV channel
1 Press TV to return to the TV mode.
2 Select the desired TV channel.
3 Press ▤/▨.

Note
To receive the teletext service accurately, keep ⊞ inside the panel switched on during teletext operation.

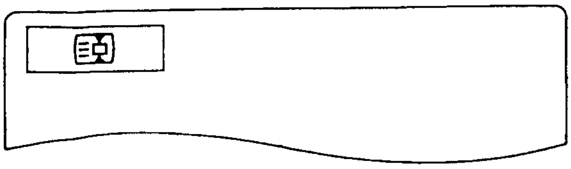
To display the index page
Press ▤i (INDEX).
If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page
Press ▤+ (PAGE+) or ▤− (PAGE−).

To superimpose the teletext display on the TV picture
Press ▤/▨ twice from TV mode.
Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed
Press ▤× (TEXT CL).
This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated/changed
Press ▤⏸ (HOLD). The HOLD symbol appears at the top of the screen.



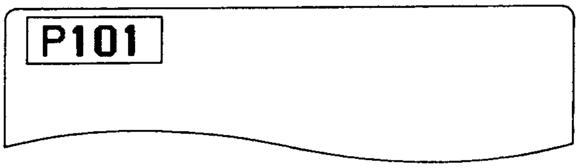
To resume normal teletext reception, press ▤/▨.

To enlarge the teletext display
Press ▤÷.
Press once to enlarge the upper half of the display ; press again to enlarge the lower half of the display ; press again to return to the normal display.

To reveal concealed infomation such as the answers to a quiz
Press ▤? (REVEAL).
Press again to conceal the answers.

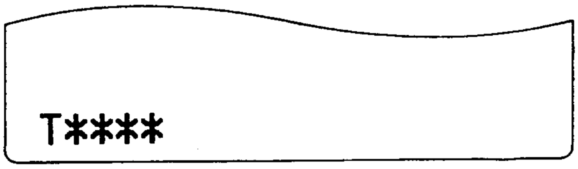
To adjust the contrast of the teletext display.
When in teletext mode, adjust by using the + or − keys adjacent to the ▥ key.

To watch the TV program while waiting for a requested page to be displayed
1 Request the new page.
2 Press ▤× to watch the TV program.
The requested page number appears at the top left of the screen.
When the requested page has been captured, the page number is displayed in the top left hand corner of the screen.

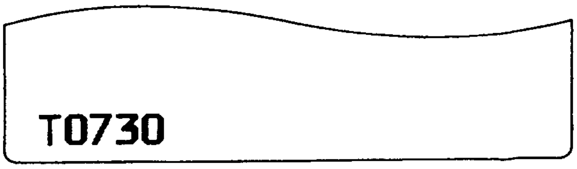


To view this page, press ▤/▨.

To have a requested page displayed at a pre-determined time
1 Request a time coded page (e. g. alarm page).
2 Press ▤◷ (TP ON).
"T****" will appear at the bottom of the screen.



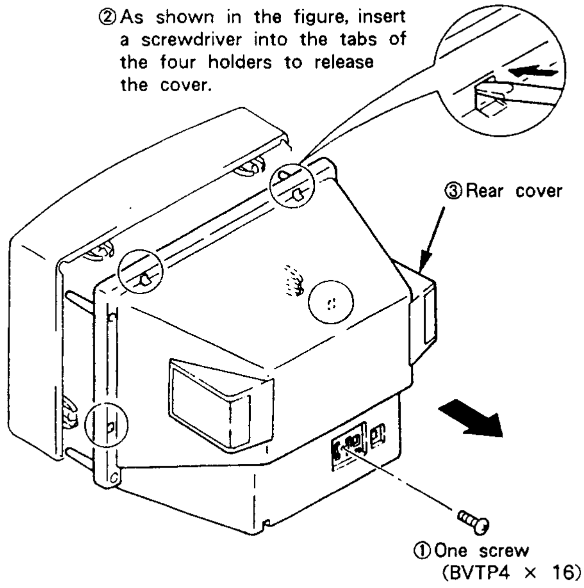
3 Enter your request time with the number buttons, using four digits. For example, 07 : 30.



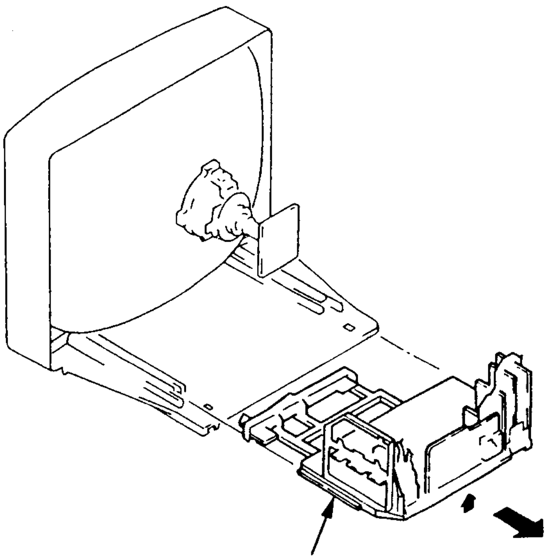
To watch the TV program until the requested time, press ▤×. At the requested time, the page number will be displayed at the bottom of the screen.
To view this page, press ▤/▨.
To cancel the request, first ensure that the teletext page is displayed, then press ▤◷ (TP OFF).

SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

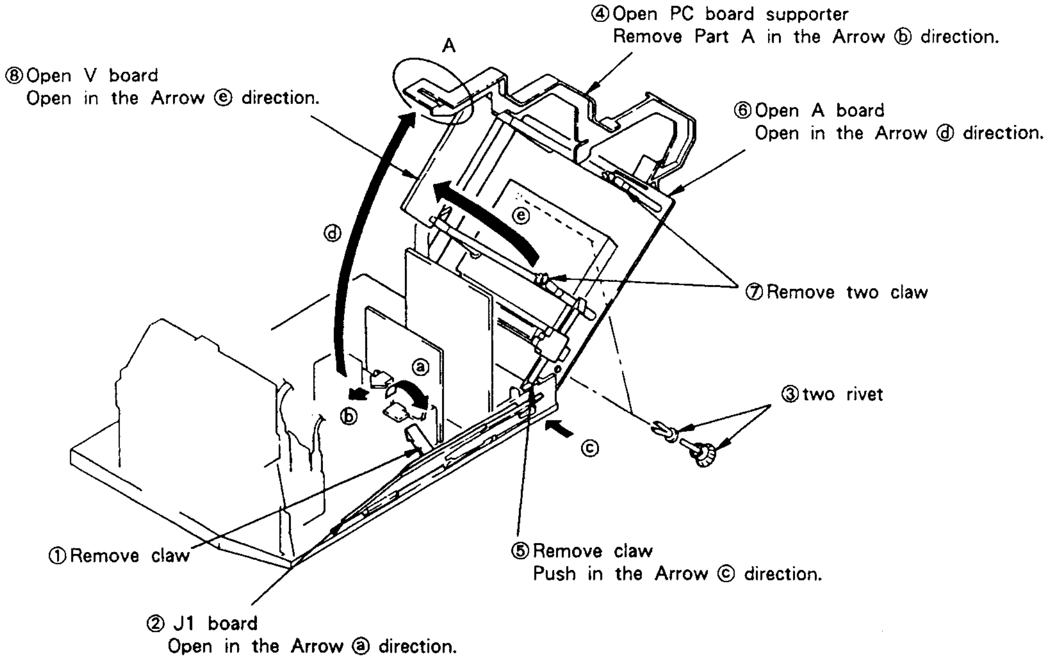

②As shown in the figure, insert a screwdriver into the tabs of the four holders to release the cover.
③Rear cover
①One screw
(BVTP4 × 16)

2-2. CHASSIS ASSY REMOVAL

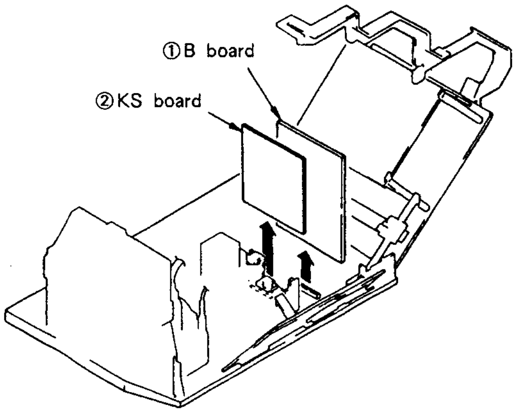


Lift and pull out the rear part of the main chassis toward the rear.

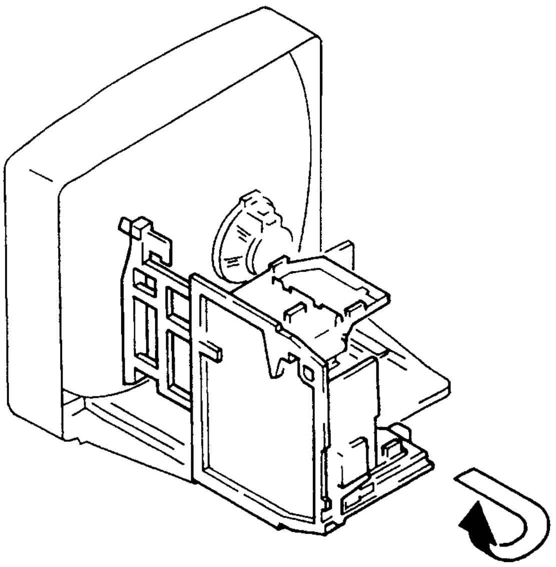
2-3. J1, A AND V BOARDS REMOVAL


A
④Open PC board supporter
Remove Part A in the Arrow ⓑ direction.
⑧Open V board
Open in the Arrow ⓔ direction.
⑥Open A board
Open in the Arrow ⓓ direction.
ⓔ
ⓓ
⑦Remove two claw
ⓐ
ⓑ
③two rivet
ⓒ
①Remove claw
⑤Remove claw
Push in the Arrow ⓒ direction.
② J1 board
Open in the Arrow ⓐ direction.

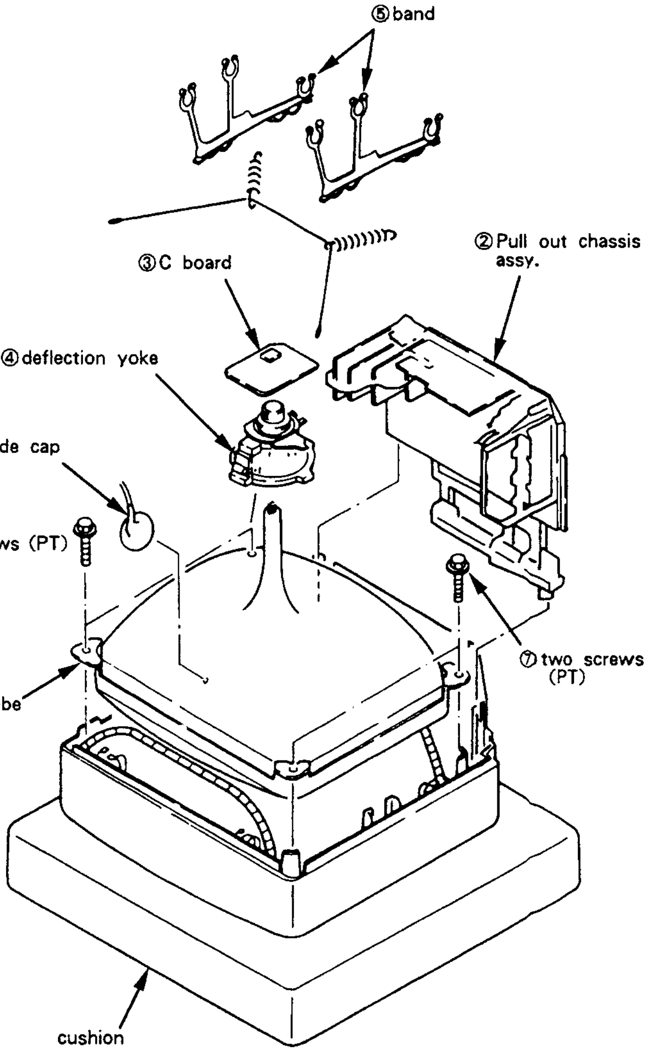
2-4. KS AND B BOARDS REMOVAL


①B board
②KS board

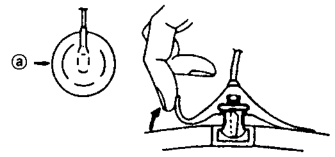
2-5. SERVICE POSITION



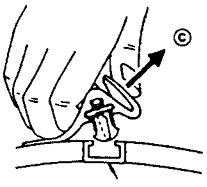
2-6. PICTURE TUBE REMOVAL


⑤band
②Pull out chassis assy.
③C board
④deflection yoke
①anode cap
⑥two screws (PT)
⑦two screws (PT)
⑧picture tube
cushion

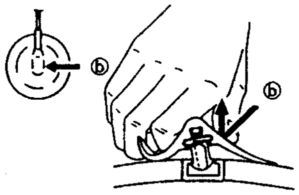
- **Removing Procedures**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.


ⓒ
Anode button

② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted :

◑CONTRAST control ······· 80% (or Normal by Commander)
☼BRIGHTNESS control ····· 50%

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Precaution

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in oder to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3–1. BEAM LANDING

1. Input a raster signal with the pattern generator.
   CONTRAST ··············· normal
   BRIGHTNESS ············· normal
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 3–1 to 3–3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3–1)
5. Switch over the raster signal to blue and green and confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corners is not right, adjust by using the magnet. (Fig. 3–4)

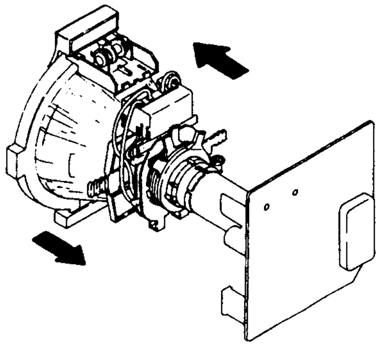


Fig. 3–1

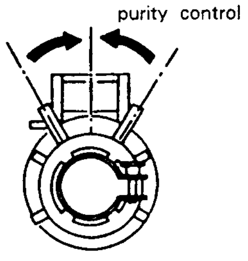

purity control

Fig. 3–2

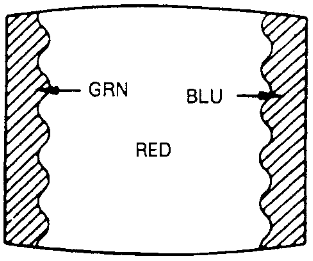


Fig. 3–3

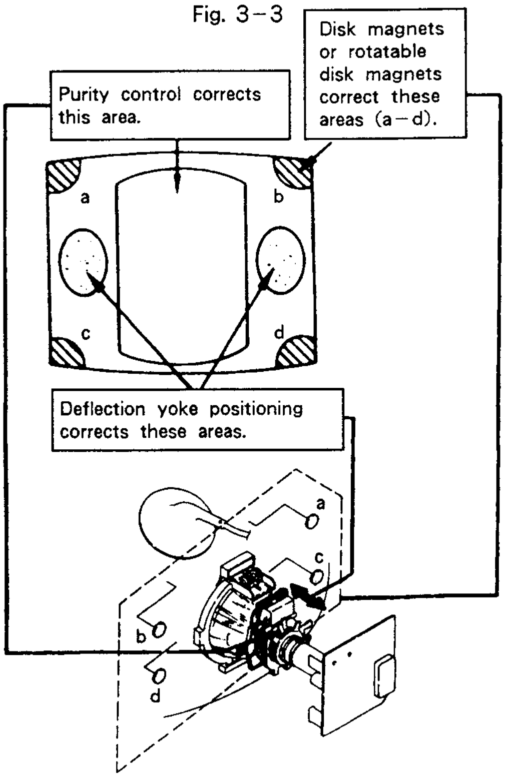

Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas (a–d).
a
b
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

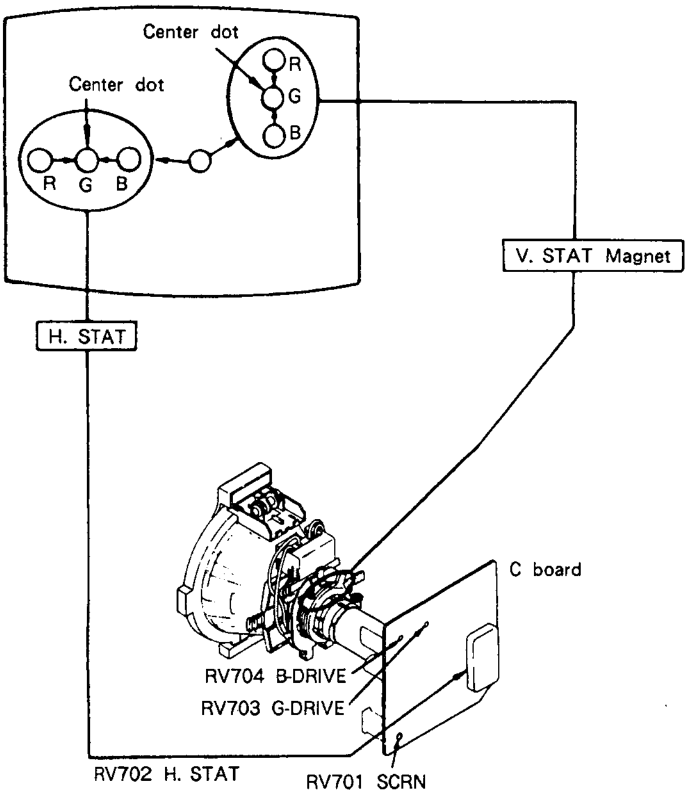
Fig. 3–4

3−2. CONVERGENCE

Preparation :

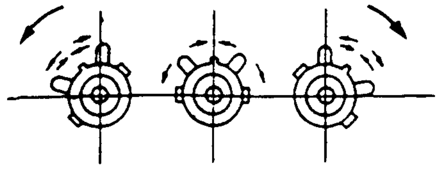
- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

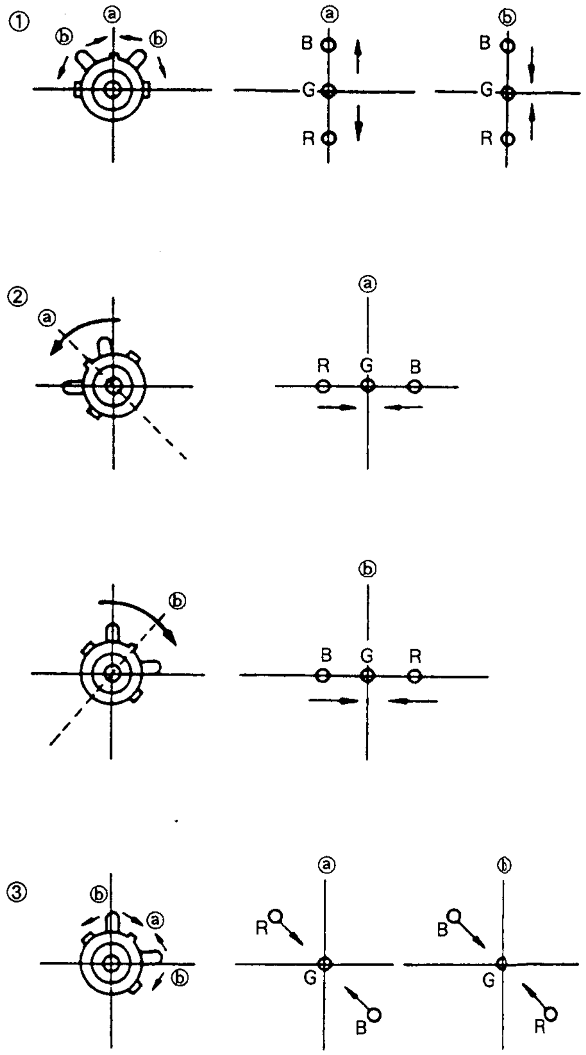

Center dot
Center dot
R
G
B
R G B
V. STAT Magnet
H. STAT
C board
RV704 B-DRIVE
RV703 G-DRIVE
RV702 H. STAT
RV701 SCRN

1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen. (Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen. (Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)

- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



4. When the V. STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.

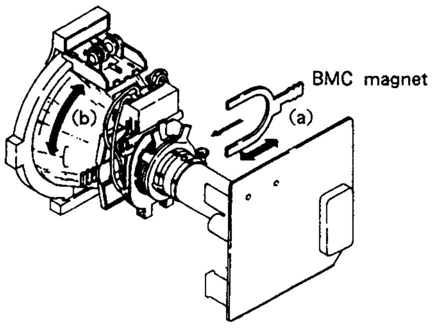

①
ⓐ
ⓑ
ⓑ
ⓐ
B
G
R
ⓑ
B
G
R
②
ⓐ
ⓐ
R G B
ⓑ
ⓑ
B G R
③
ⓑ
ⓐ
ⓑ
ⓐ
R
G
B
ⓑ
B
G
R

If the red and blue dots do not coincide with green dot, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

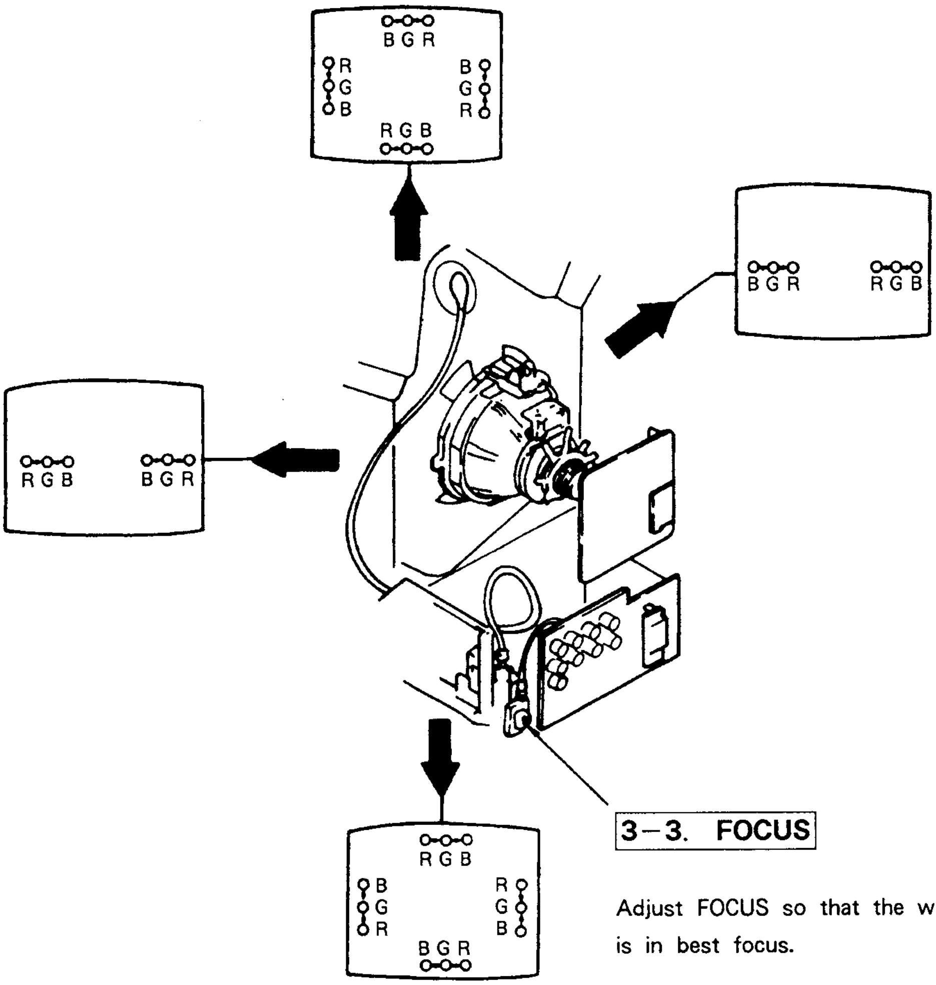

BMC magnet
(a)
(b)

(2) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

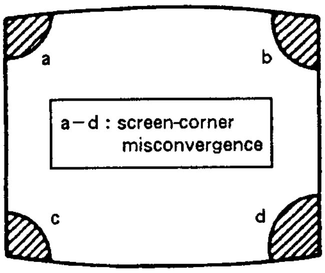
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.


BGR
R G B
B G R
RGB
BGR
RGB
RGB
BGR
RGB
B G R
R G B
BGR

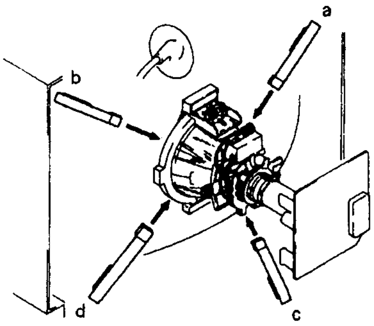
3–3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.

(3) Screen-corner Convergence


a
b
a–d : screen-corner misconvergence
c
d

Affix a permalloy ass'y corresponding to the misconverged areas.



Permalloy assy, correction.

3–4. WHITE BALANCE

〔Screen (G2) Setting〕

1. Input dot signals from the pattern generator.
2. Set the picture BRIGHTNESS control to the minimum level.
3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
4. While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

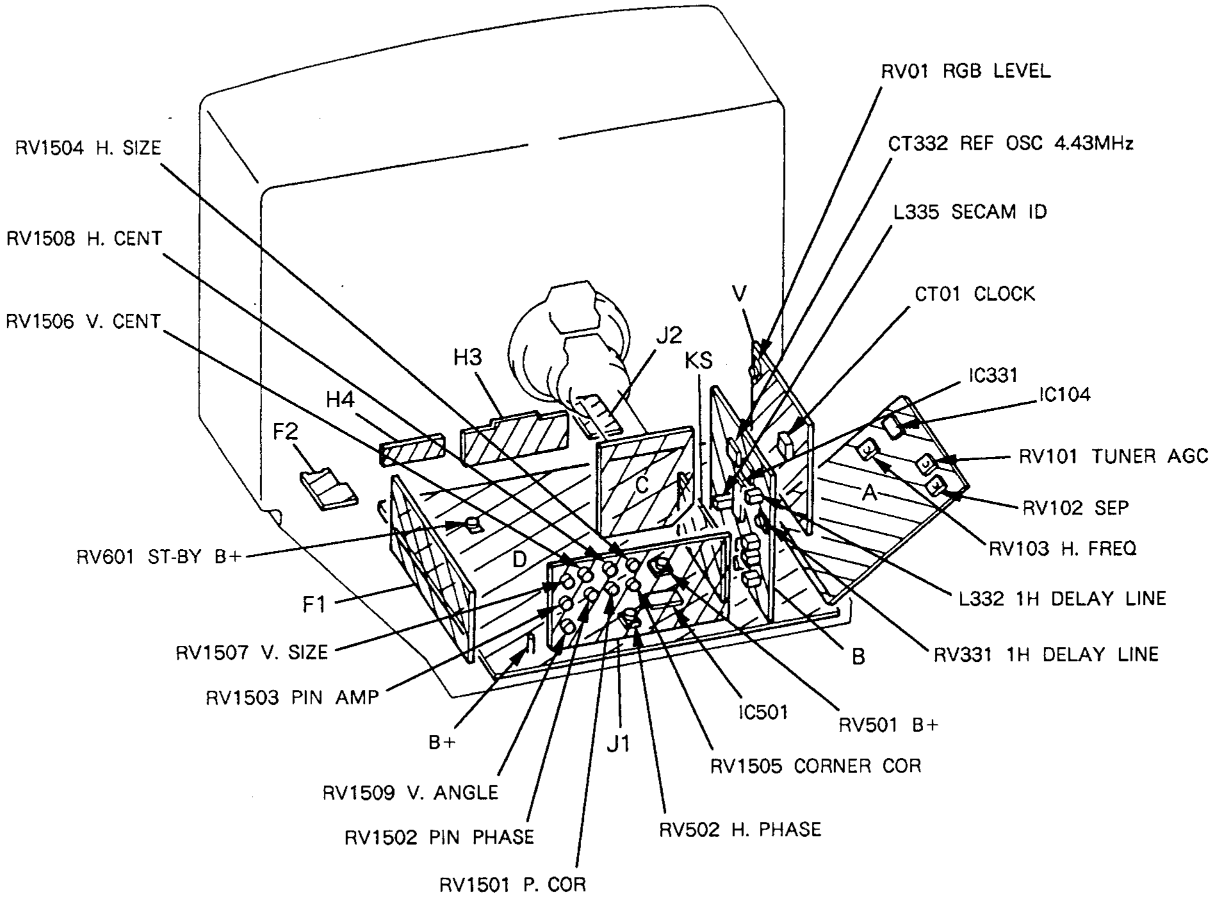
〔White Balance Adjustment〕

1. Input all-white signals from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4

CIRCUIT ADJUSTMENTS


RV01 RGB LEVEL
CT332 REF OSC 4.43MHz
L335 SECAM ID
CT01 CLOCK
IC331
IC104
RV101 TUNER AGC
RV102 SEP
RV103 H. FREQ
L332 1H DELAY LINE
RV331 1H DELAY LINE
RV1504 H. SIZE
RV1508 H. CENT
RV1506 V. CENT
V
J2
KS
H3
H4
F2
C
A
D
RV601 ST-BY B+
F1
RV1507 V. SIZE
RV1503 PIN AMP
B
IC501
RV501 B+
B+
J1
RV1505 CORNER COR
RV1509 V. ANGLE
RV1502 PIN PHASE
RV502 H. PHASE
RV1501 P. COR

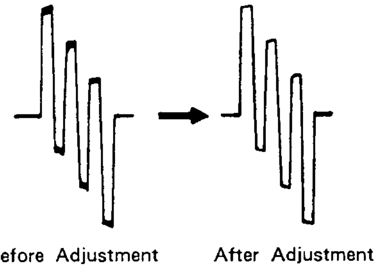
4–1. B BOARD ADJUSTMENTS

REF OSC Adjustment (CT332)

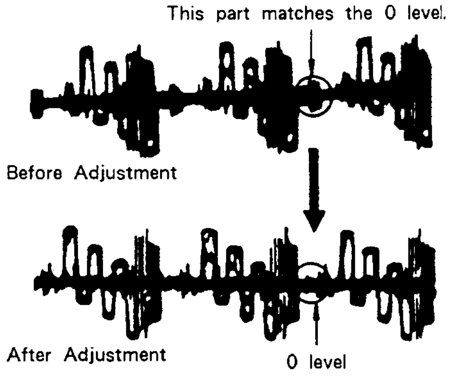
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑰ of IC331 and ground.
3. Adjust CT332 to obtain color synchronization.
4. Remove the jumper wire from IC331.

1H DELAY LINE Adjustment (L332, RV331)

1. Input a PAL COLOR BAR pattern.
2. Connect the oscilloscope to pin ③ (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope.
3. Adjust L332 to minimize the double waveform outline.


Before Adjustment
After Adjustment

4. Input a PAL TEST COLOR BAR pattern.
5. Rotate the RV331 VR and adjust till the ANTI-PAL part of the waveform matches the 0 level.


This part matches the 0 level.
Before Adjustment
After Adjustment
0 level

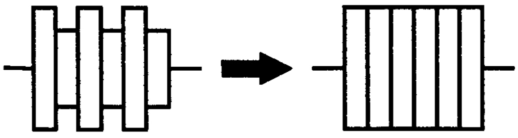
6. L332 and RV331 affect each other. So repeat till the conditions of both are met.

SECAM ID Adjustment (L335)

1. Input a SECAM COLOR BAR pattern.
2. Connect a Digital Multimeter to pin ㉑ of IC331.
3. Adjust L335 so that the indicator goes up to the maximum.

BELL FILTER Adjustment (T331)

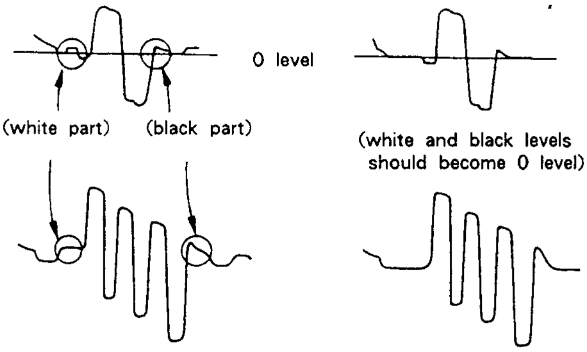
1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q335 emitter.
3. Adjust T331 so that the waveform becomes flat.



Before Adjustment After Adjustment

SECAM DISCRI Adjustment (L333, L334)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to pin ① of IC331.
3. Adjust L333 so that white and black parts of the waveform of pin ① becames 0 level.
4. Connect an oscilloscope to pin ③ of IC331.
5. Adjust L334 so that white and black parts of the waveform of pin ③ becomes 0 level.



(Before Adjustment) (After Adjustment)

4-2. D BOARD ADJUSTMENTS

B+ Adjustment (RV501)

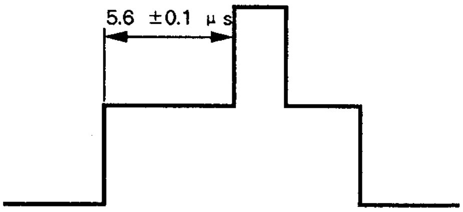
1. Connect a Digital Multimeter to TP91.
2. Adjust RV501 so that the voltage becomes 135 ±0.2 V.

ST-BY B+ Adjustment (RV601)

1. Set up ⏻standby (Remote Commander) mode.
2. Connect the Digital Multimeter to TP91.
3. Adjust RV601 so that the voltage becomes 135 ±3 V.
4. Release the ⏻standby (Remote Commander) mode.

H. PHASE Adjustment (RV502)

1. Input a PAL TEST COLOR BAR pattern.
2. Set the CONTRAST and BRIGHTNESS controls to the standard positions.
3. Set RV1508 (H. CENT) to the mechanical center position.
4. Connect an oscilloscope to pin ⑪ (SPC OUT) of IC501.
5. Rotate RV502 and adjust Block T to 5.6 ±0.1 μs.



4-3. A BOARD ADJUSTMENTS

TUNER AGC Adjustment (RV101)

1. Tune in an off-air signal.
2. Adjust RV101 so that snow-noise and cross-modulation just disappear from the picture.

STEREO SEPARATION Adjustment (RV102)

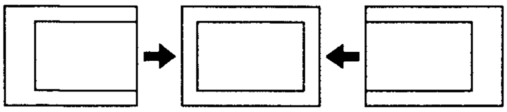
1. Input stereo signals. (L-CH 1 kHz, R-CH 400 Hz)
2. Check the stereo indicator.
3. Connect an oscilloscope to pin ① (L) of CNA11 through band pass filter of 1 kHz.
4. Adjust RV102 so that 1 kHz voltage goes down to the minimum.

H. FREQ Adjustment (RV103)

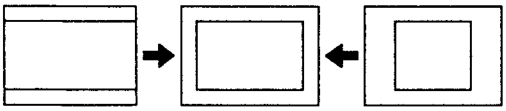
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑫ of IC104 and ground.
3. Connect a frequency counter to pin ⑥ of IC104 through a probe of 10 : 1.
4. Adjust RV103 so that H. frequency becomes 15,625 ±50 Hz.

4-4. J1 BOARD ADJUSTMENTS

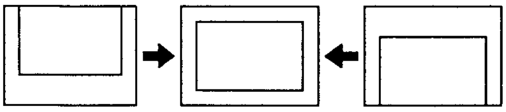
RV1508
H. CENT (HORIZONTAL CENTER)



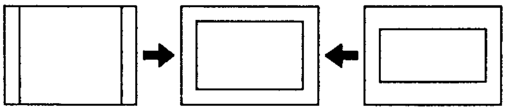
RV1504
H. SIZE (HORIZONTAL SIZE)



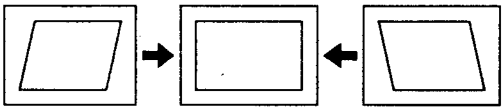
RV1506
V. CENT (VERTICAL CENTER)



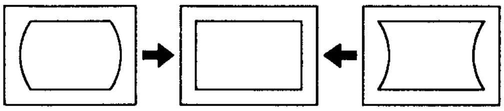
RV1507
V. SIZE (VERTICAL SIZE)



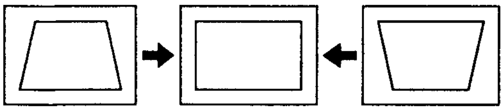
RV1509
V. ANGLE (VERTICAL ANGLE)



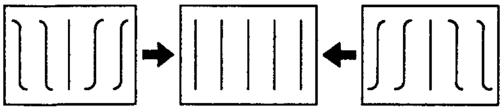
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



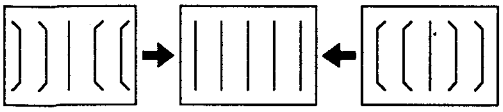
RV1502
PIN PHASE (PINCUSHION PHASE)



RV1501
PIN COR (PINCUSHION CORRECT)



RV1505
CORNER COR (CORNER CORRECT)



4-5. V BOARD ADJUSTMENTS

Clock Adjustment (CT01)

1. Disconnect the V-1 connector.
2. Set up the TELE TEXT mode.
3. Adjust CT01 to stop pictures from scrolling.

RGB Level Adjustment (RV01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes 0.75 V.

4-6. SUB ADJUSTMENTS

SUB BRIGHTNESS Adjustment

1. Receive and display a TEST COLOR BAR pattern.
2. Push →•← on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Reduce the ◑CONTRAST to the minimum level.
6. Adjust the ☼BRIGHTNESS control until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.
7. Push the AFT button. (SUB mode is cleared)

Where no TEST COLOR BAR pattern is available.

1. Display a COLOR BAR pattern.
2. Push →•← on the remote commander to invoke the normal state.
   Set the ⊛COLOR to normal mode.

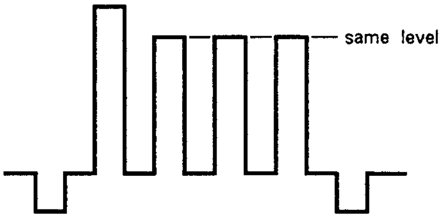
Steps 3 – 5 are the same as above.

6. 20 IRE is close to blue, so adjust the ☼BRIGHTNESS control till blue is faintly luminous.
7. Same as Step 7 above.
8. Push →•← on the remote commander to invoke the normal state.

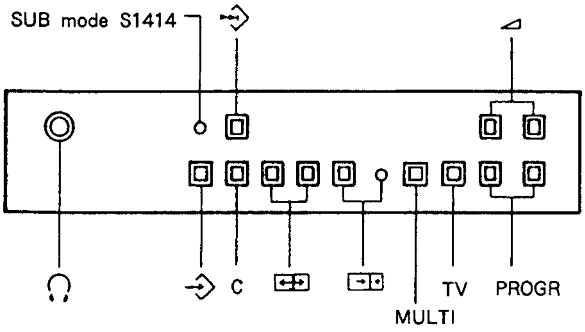
* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

SUB COLOR Adjustment

1. Display a COLOR BAR pattern.
2. Push →•← on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Adjust the COLOR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
6. Push the AFT button. (SUB mode is cleared.)



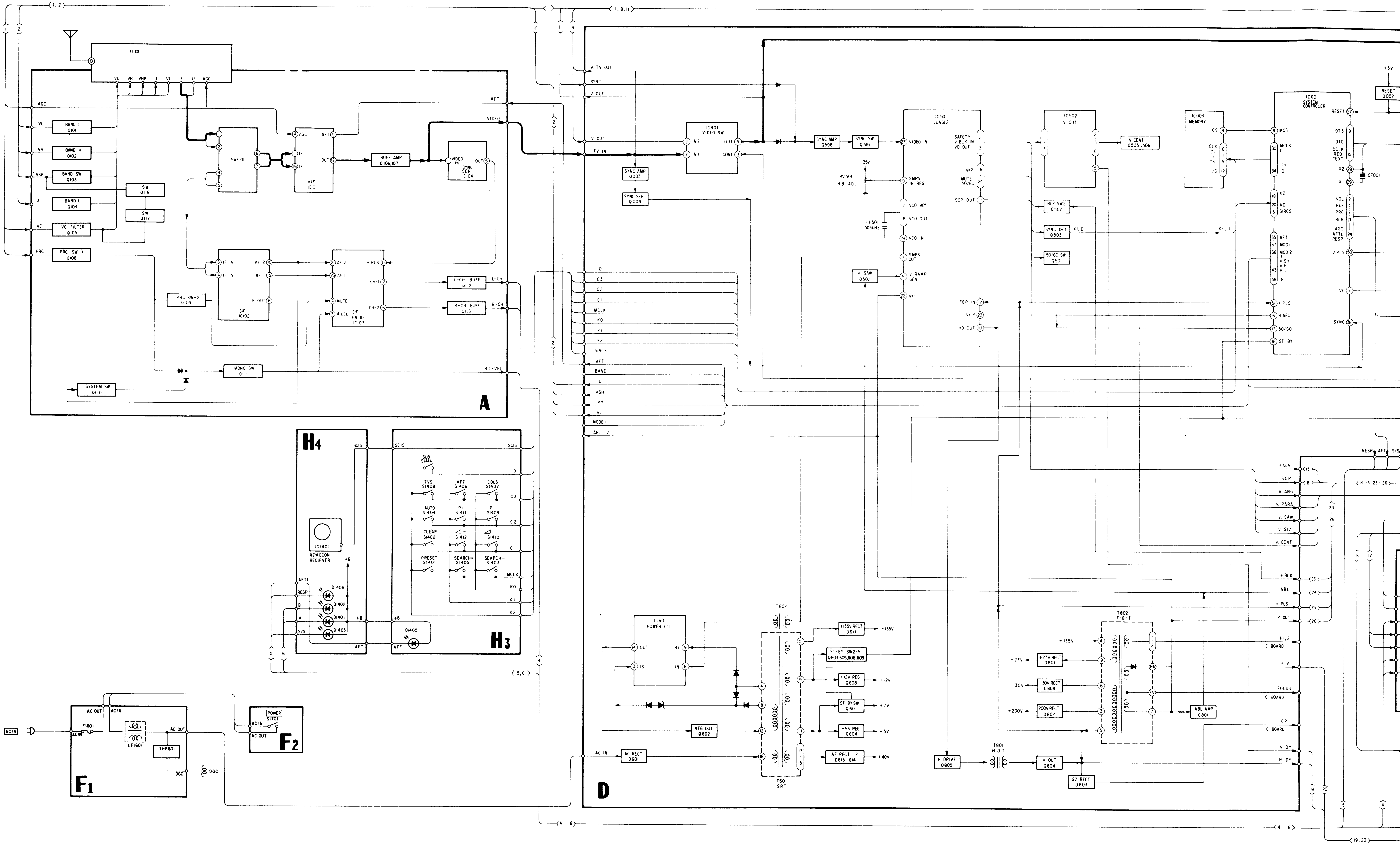
* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment with 30 seconds, or repeat from Step 4.

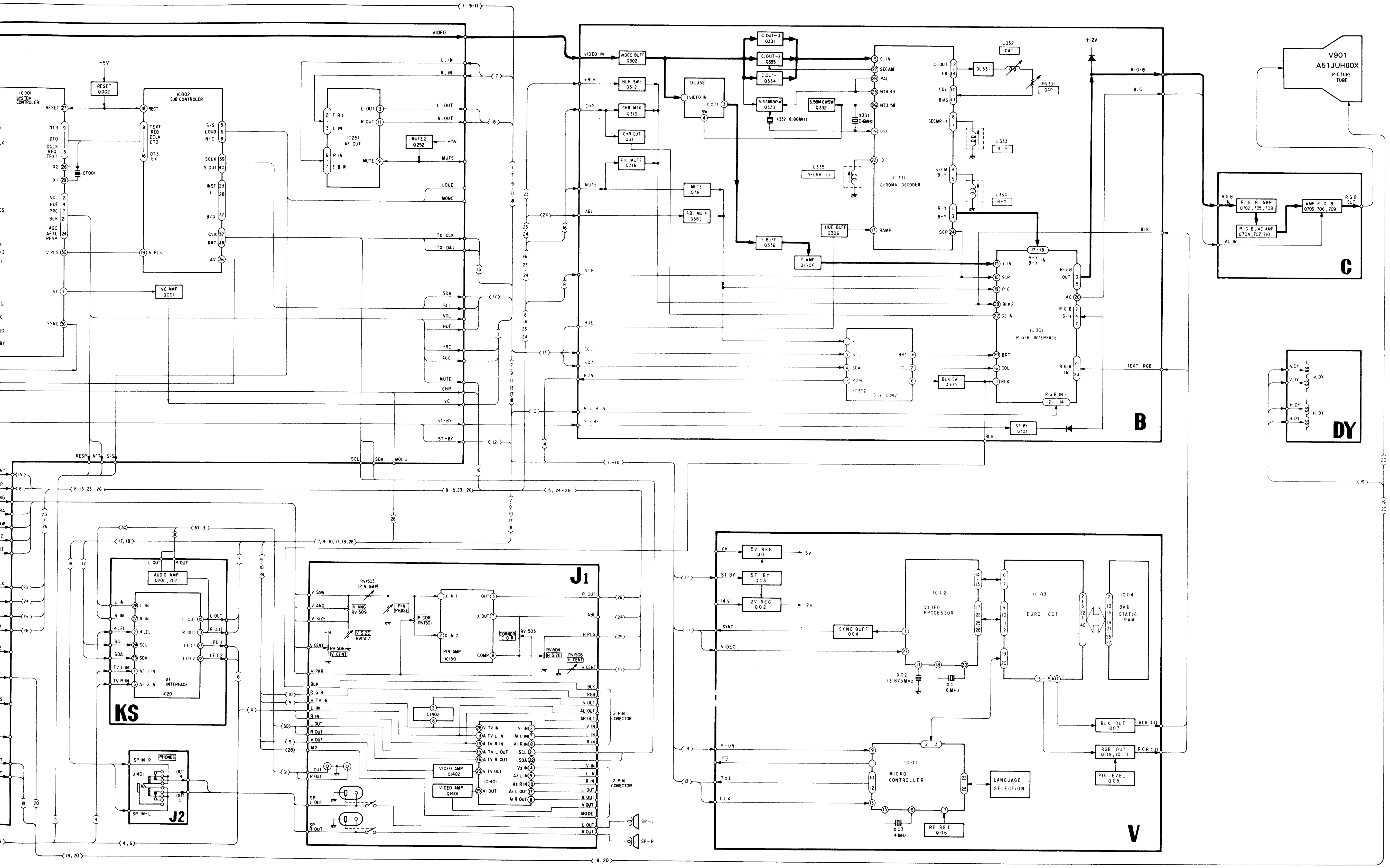


SECTION 5

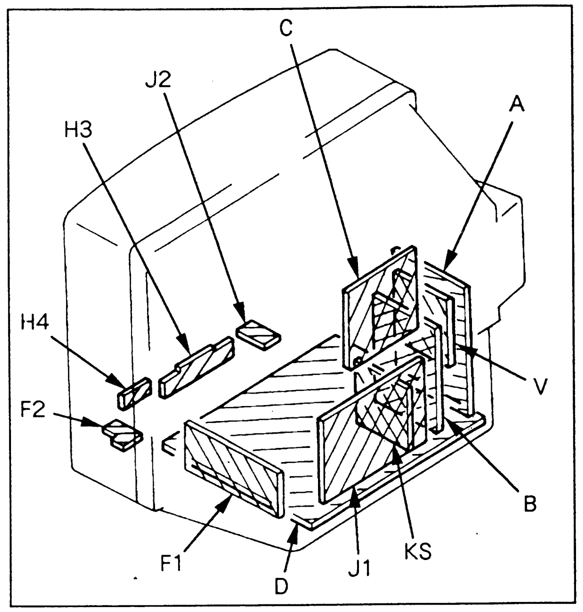
DIAGRAMS

5-1. BLOCK DIAGRAM


TU101
AGC
VL
VH
VSH
U
VC
PRC
BAND L Q101
BAND H Q102
BAND SW Q103
BAND U Q104
VC FILTER Q105
PRC SW-1 Q108
SW Q116
SW Q117
SWF101
VIF IC101
BUFF AMP Q106,107
VIDEO IN SYNC SEP IC104
AFT
VIDEO
SIF IC102
SIF FM ID IC103
PRC SW-2 Q109
L-CH BUFF Q112
R-CH BUFF Q113
L-CH
R-CH
MONO SW Q111
4 LEVEL
SYSTEM SW Q110
A
H4
IC1401 REMOCON RECIEVER
D1406
D1402
D1401
D1403
D1405
H3
SUB S1414
TVS S1408
AFT S1406
COLS S1407
AUTO S1404
P+ S1411
P- S1409
CLEAR S1402
S1412
S1410
PRESET S1401
SEARCH+ S1405
SEAPCH- S1403
SCIS
D
C3
C2
C1
MCLK
K0
K1
K2
AFTL
RESP
S/S
+8
AC IN
F1
AC OUT
F1601
LF1601
THP601
DGC
F2
POWER S1701
V. TV OUT
SYNC
V. OUT
V. OUT
TV. IN
IC401 VIDEO SW
SYNC AMP Q003
SYNC SEP Q004
SYNC AMP Q598
SYNC SW Q591
IC501 JUNGLE
RV501 +B ADJ
CF501 503kHz
V. SAW Q502
IC502 V-OUT
V. CENT I Q505,506
BLK SW2 Q507
SYNC DET Q503
50/60 SW Q501
IC003 MEMORY
IC001 SYSTEM CONTROLER
RESET Q002
CF001
SIRCS
BAND
MODE 1
ABL 1, 2
IC601 POWER CTL
T602
T601 SRT
+135V RECT D611
ST-BY SW2-5 Q603,605,606,609
+12V REG Q608
ST-BY SW1 Q601
+5V REG Q604
AF RECT 1,2 D613,614
REG OUT Q602
AC RECT D601
T802 F.B.T
+27V RECT D801
-30V RECT D809
200V RECT D802
ABL AMP Q801
H DRIVE Q805
T801 H.D.T
H OUT Q804
G2 RECT D803
H CENT
SCP
V. ANG
V. PARA
V. SAW
V. SIZ
V. CENT
+BLK
ABL
H. PLS
P. OUT
HI, 2
C BOARD
H.V
FOCUS
G2
V-DY
H-DY
D


IC001
SYSTEM CONTROLER
IC002
SUB CONTROLER
RESET Q002
+5V
CF001
VC AMP Q001
IC251
AF OUT
MUTE 2 Q252
VIDEO
L.IN
R.IN
L.OUT
R.OUT
MUTE
LOUD
MONO
TX CLK
TX DAT
SDA
SCL
VOL
HUE
PRC
AGC
CHR
VC
ST-BY
RESP
AFT
S/S
MOD 2
VIDEO BUFF Q302
BLK SW2 Q312
CHR MIX Q313
CHR OUT Q311
PIC MUTE Q316
DL332
C.OUT-3 Q331
C.OUT-2 Q335
C.OUT-1 Q334
4.43MCWSW Q333
3.58MCWSW Q332
X332 8.86MHz
X331 7.16MHz
IC331
CHROMA DECODER
L332 DAT
DL331
RV331 DAR
L333 R-Y
L334 B-Y
L335 SECAM ID
MUTE Q381
ABL MUTE Q382
Y BUFF Q336
Y AMP Q1306
HUE BUFF Q306
IC301
R.G.B INTERFACE
IC302
D/A CONV
BLK SW Q305
ST BY Q303
+12V
R-G-B
A.C
BLK
TEXT RGB
B
V901
A51JUH60X
PICTURE TUBE
R.G.B AMP Q702,705,708
R.G.B AC AMP Q704,707,710
AMP R.G.B Q703,706,709
C
V.DY
H.DY
DY
AUDIO AMP Q201,202
AF INTERFACE
IC201
KS
PHONES
J1401
SP IN-R
SP IN-L
J2
RV1503 PIN AMP
V.ANG RV1509
PIN PHASE
P.COR RV1501
V.SIZE RV1507
RV1506 V.CENT
CORNER C.O.R
RV1505
RV1504 H.SIZE
RV1508 H.CENT
PIN AMP
IC1501
P.OUT
ABL
H.PLS
H.CENT
IC1402
VIDEO AMP Q1402
VIDEO AMP Q1401
IC1401
21 PIN CONECTOR
J1
SP-L
SP-R
5V REG Q01
ST BY Q03
12V REG Q02
SYNC BUFF Q04
IC02
VIDEO PROCESSOR
IC03
EURO-CCT
IC04
8K8 STATIC RAM
X02 13.875MHz
X01 6MHz
BLK OUT Q07
RGB OUT Q09,10,11
PIC LEVEL Q05
IC01
MICRO CONTROLLER
LANGUAGE SELECTION
X03 4MHz
RE SET Q06
V

5-2. CIRCUIT BOARDS LOCATION


C
J2
H3
A
H4
V
F2
B
F1
D
J1
KS

Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50 WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power 1/4W

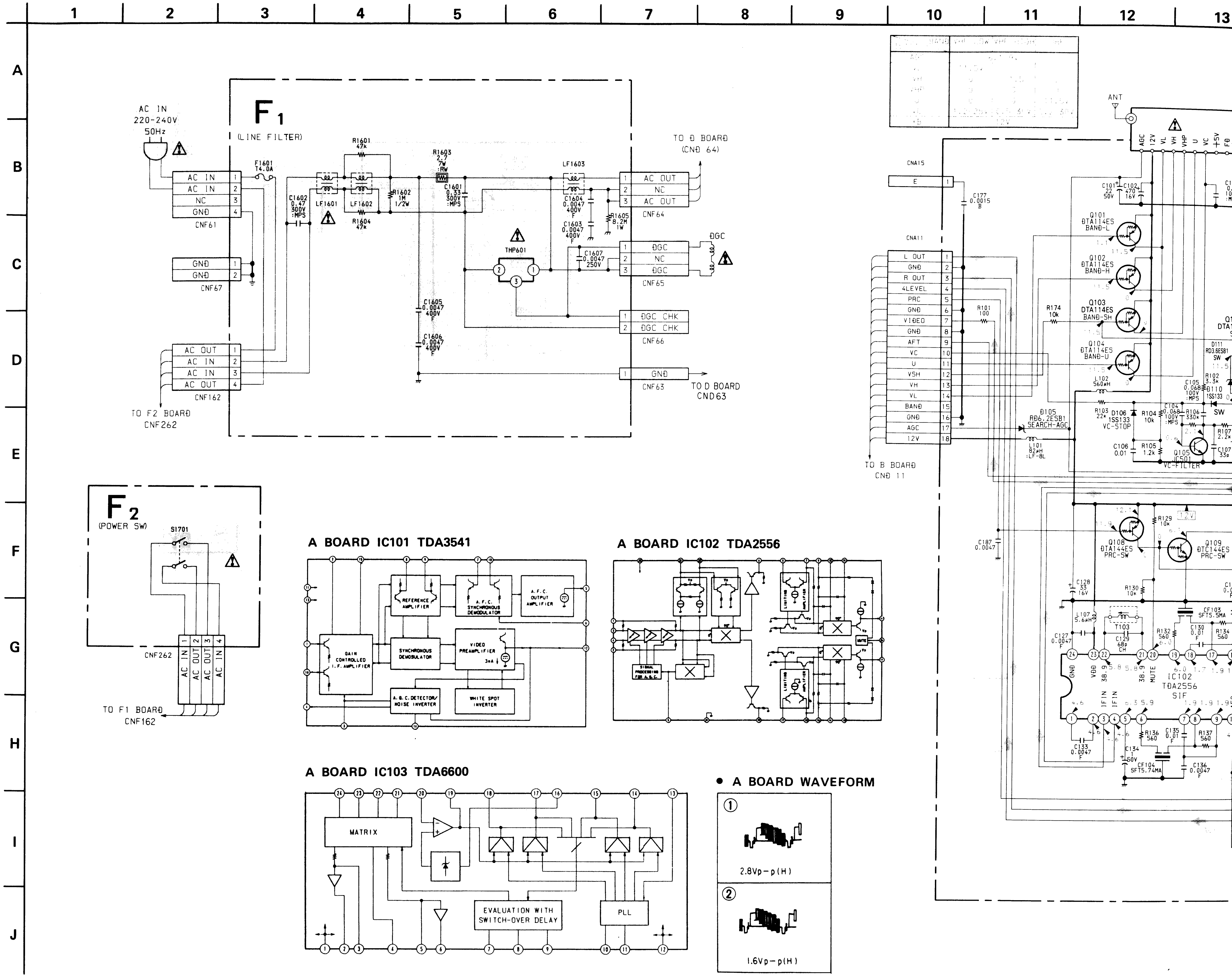
- All resistors are in ohms.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- △ : internal component.
- ▭ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- ▭ : adjustment for repair.
- Voltage variations may be noted due to normal production tolerance.
- ━━━ : B+ bus.
- ━ ━ ━ : B− bus.
- ░░░ : signal path.

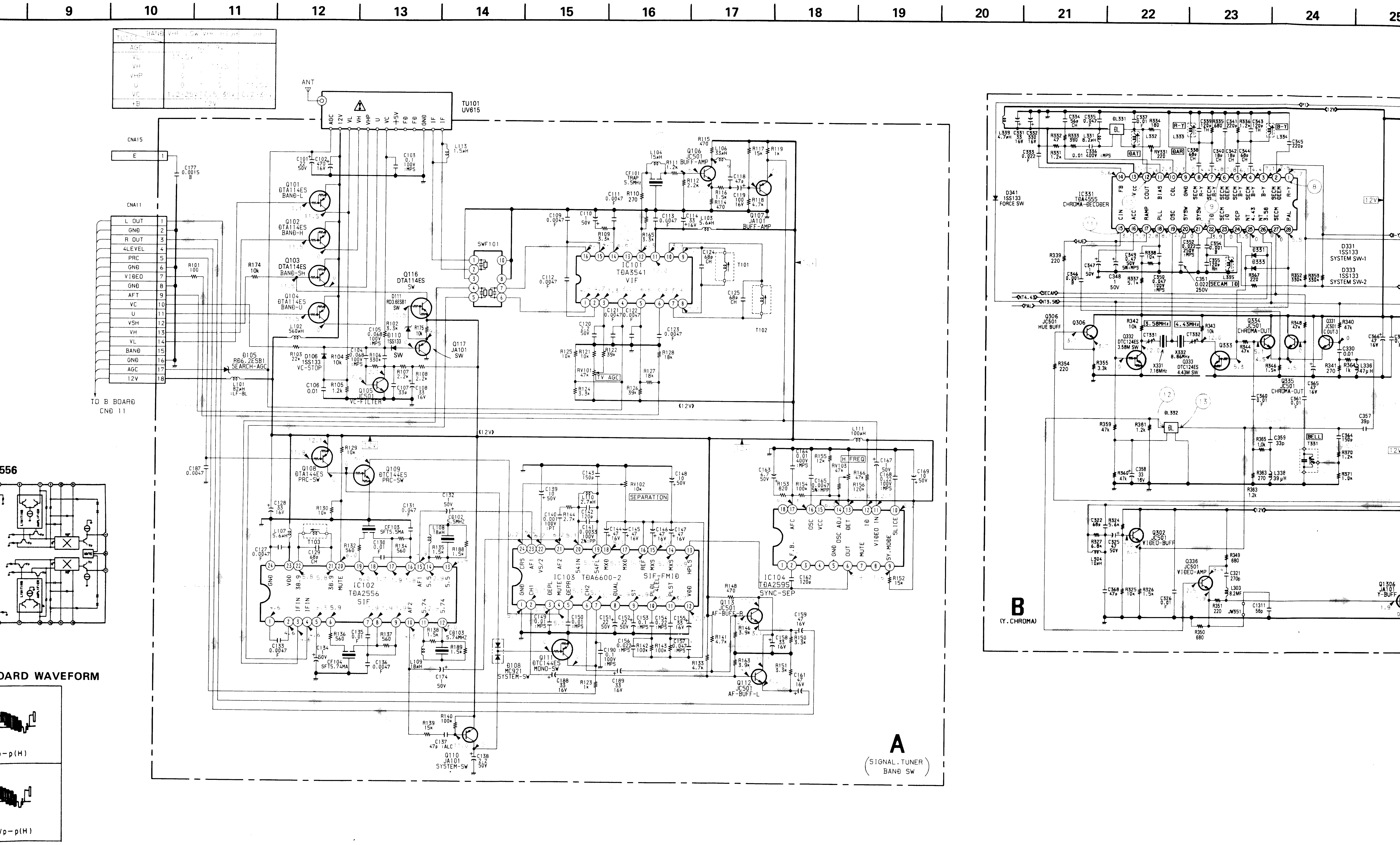
Reference information

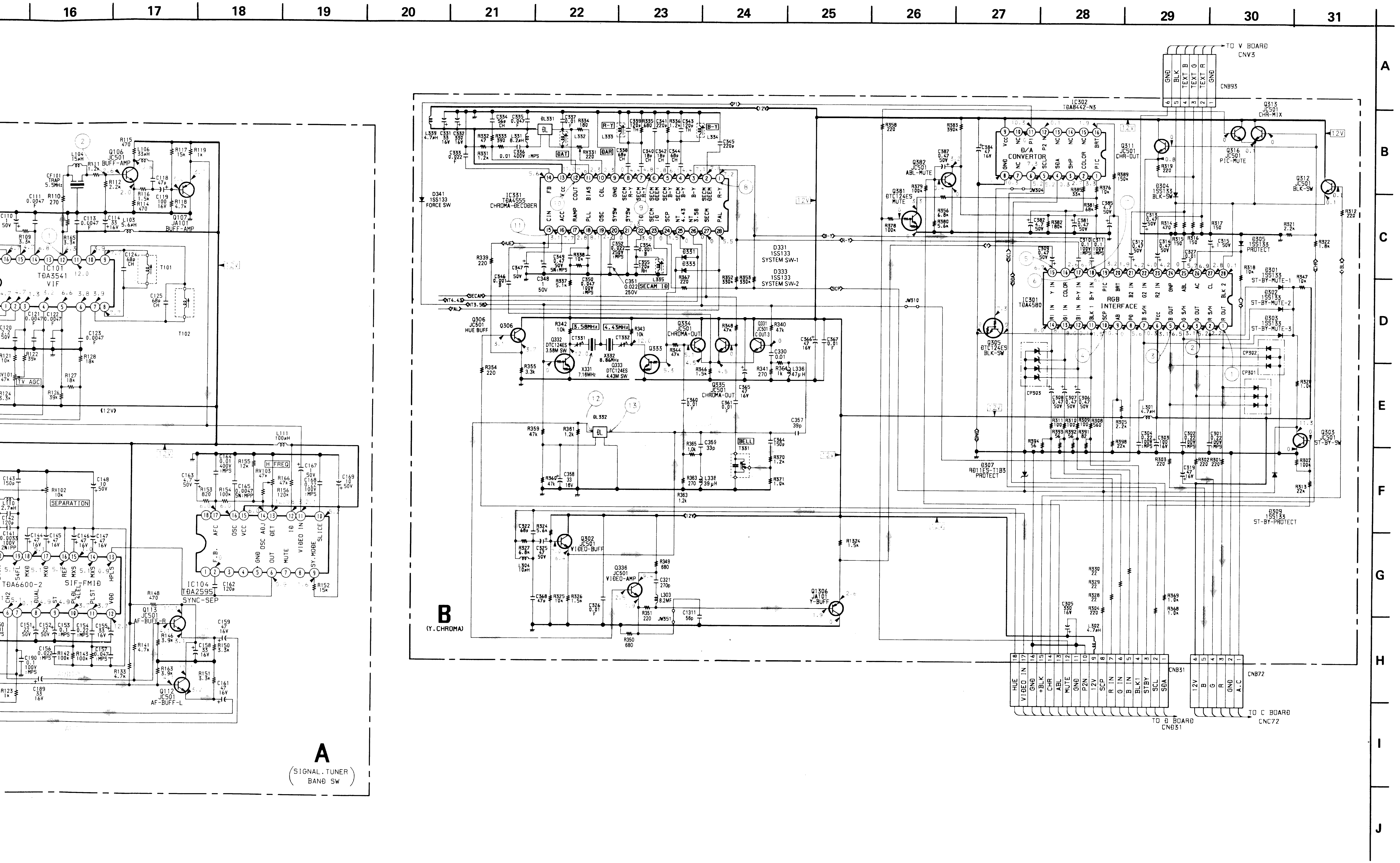
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

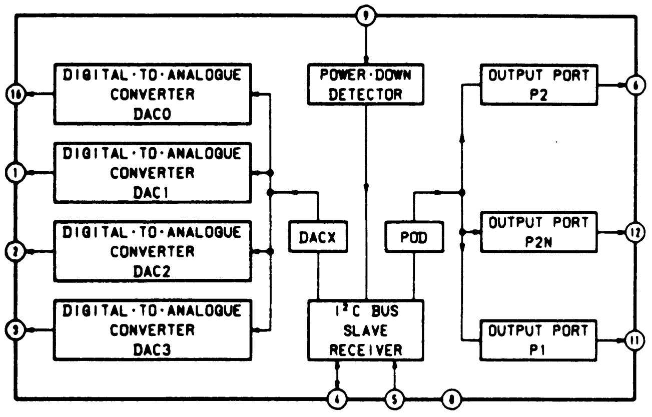
5-3. SCHEMATIC DIAGRAMS


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
F1
(LINE FILTER)
AC IN
220-240V
50Hz
AC IN
AC IN
NC
GND
CNF61
GND
GND
CNF67
AC OUT
AC IN
AC IN
AC OUT
CNF162
TO F2 BOARD
CNF262
F1601
T4.0A
C1602
0.47
300V
:MPS
LF1601
LF1602
R1601
47k
R1604
47k
R1602
1M
1/2W
R1603
2.7
7W
:RW
C1601
0.33
300V
:MPS
LF1603
C1604
0.0047
400V
C1603
0.0047
400V
R1605
8.2M
1W
THP601
C1607
0.0047
250V
C1605
0.0047
400V
C1606
0.0047
400V
TO D BOARD
(CND 64)
AC OUT
NC
AC OUT
CNF64
DGC
DGC
NC
DGC
CNF65
DGC CHK
DGC CHK
CNF66
GND
CNF63
TO D BOARD
CND63
F2
(POWER SW)
S1701
AC IN
AC OUT
AC OUT
AC IN
CNF262
TO F1 BOARD
CNF162
A BOARD IC101 TDA3541
REFERENCE AMPLIFIER
A.F.C. SYNCHRONOUS DEMODULATOR
A.F.C. OUTPUT AMPLIFIER
GAIN CONTROLLED I.F. AMPLIFIER
SYNCHRONOUS DEMODULATOR
VIDEO PREAMPLIFIER
A.G.C. DETECTOR/NOISE INVERTER
WHITE SPOT INVERTER
A BOARD IC102 TDA2556
SIGNAL PROCESSING FOR A.G.C.
LIMITING AMPLIFIER
MUTE
A BOARD IC103 TDA6600
MATRIX
EVALUATION WITH SWITCH-OVER DELAY
PLL
A BOARD WAVEFORM
①
2.8Vp-p(H)
②
1.6Vp-p(H)
CNA15
E
C177
0.0015
B
CNA11
L OUT
GND
R OUT
4LEVEL
PRC
GND
VIDEO
GND
AFT
VC
U
VSH
VH
VL
BAND
GND
AGC
12V
TO B BOARD
CNB 11
R101
100
R174
10k
ANT
AGC
12V
VL
VH
VHP
U
VC
+5V
C101
22
50V
C102
470
16V
Q101
DTA114ES
BAND-L
Q102
DTA114ES
BAND-H
Q103
DTA114ES
BAND-SH
Q104
DTA114ES
BAND-U
L102
560μH
R103
22k
D106
1SS133
VC-STOP
R104
10k
C104
0.068
100V
:MPS
R106
330k
D105
RD6.2ESB1
SEARCH-AGC
L101
82μH
:LF-8L
C106
0.01
R105
1.2k
Q105
2SC501
VC-FILTER
R107
2.2k
C107
33p
C105
3.3k
0.068
100V
:MPS
D110
1SS133
D111
RD3.6ESB1
SW
R102
SW
C187
0.0047
Q108
DTA144ES
PRC-SW
R129
10k
Q109
DTC144ES
PRC-SW
C128
33
16V
R130
10k
L107
5.6μH
C127
0.0047
T103
C129
68p
CH
R132
560
C130
0.01
CF103
SFT5.5MA
R134
560
IC102
TDA2556
SIF
GND
VDD
MUTE
IF IN
IF IN
C133
0.0047
C134
1
50V
R136
560
C135
0.01
CF104
SFT5.74MA
R137
560
C136
0.0047

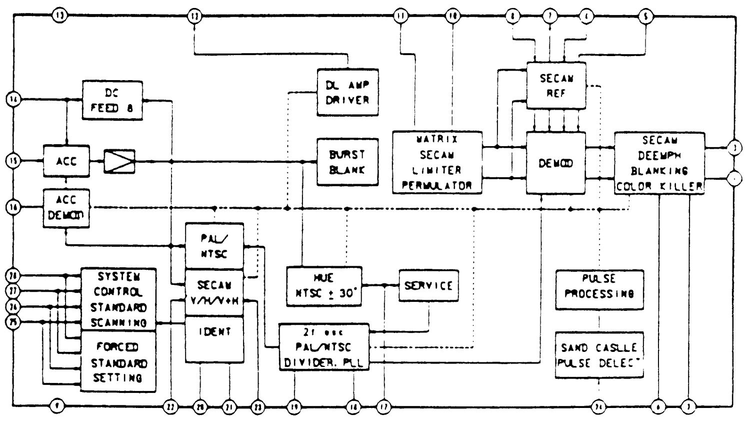

9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
ANT
TU101
UV615
CNA15
CNA11
L OUT
GND
R OUT
4LEVEL
PRC
VIDEO
AFT
VC
U
VSH
VH
VL
BAND
AGC
12V
TO B BOARD
CND 11
Q101 DTA114ES BAND-L
Q102 DTA114ES BAND-H
Q103 DTA114ES BAND-SH
Q104 DTA114ES BAND-U
Q116 DTA114ES SW
Q117 JA101 SW
Q105 JC501 VC-FILTER
D105 RD6.2ESB1 SEARCH-AGC
D106 1SS133 VC-STOP
SWF101
IC101 TDA3541 VIF
Q106 JC501 BUFF-AMP
Q107 JA101 BUFF-AMP
CF101 TRAP 5.5MHz
T101
T102
TV AGC
Q108 DTA114ES PRC-SW
Q109 DTC144ES PRC-SW
IC102 TDA2556 SIF
CF103 SFT5.5MA
CF104 SFT5.74MA
IC103 TDA6600-2 SIF-FMID
SEPARATION
Q111 DTC144ES MONO-SW
D108 MC921 SYSTEM-SW
Q110 JA101 SYSTEM-SW
IC104 TDA2595 SYNC-SEP
H.FREQ
Q113 JC501 AF-BUFF-R
Q112 JC501 AF-BUFF-L
A
(SIGNAL. TUNER BAND SW)
IC331 TDA4555 CHROMA-DECODER
D341 1SS133 FORCE SW
D331 1SS133 SYSTEM SW-1
D333 1SS133 SYSTEM SW-2
SECAM ID
Q306 JC501 HUE BUFF
Q332 DTC124ES 3.58M SW
Q333 DTC124ES 4.43M SW
X331 7.16MHz
X332 8.86MHz
Q334 JC501 CHROMA-OUT
Q335 JC501 CHROMA-OUT
Q331 JC501 COUT-3
BELL
Q302 JC501 VIDEO-BUFF
Q336 JC501 VIDEO-AMP
Q1306 JA101 Y-BUFF
B
(Y. CHROMA)
556
OARD WAVEFORM


16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
A
B
C
D
E
F
G
H
I
J
TO V BOARD CNV3
GND
BLK
TEXT B
TEXT G
TEXT R
GND
CNB93
IC302 TDA8442-N3
D/A CONVERTOR
Q311 JC501 CHR-OUT
Q313 JC501 CHR-MIX
Q316 JC501 PIC-MUTE
Q312 JC501 BLK-SW
Q304 1SS133 BLK-SW
Q382 JC501 ABL-MUTE
Q381 DTC124ES MUTE
D305 1SS133 PROTECT
D301 1SS133 ST-BY-MUTE-1
D302 1SS133 ST-BY-MUTE-2
D303 1SS133 ST-BY-MUTE-3
IC301 TDA4580 RGB INTERFACE
Q305 DTC124ES BLK-SW
Q303 JC501 ST-BY-SW
D307 RD11ES-T1B3 PROTECT
D309 1SS133 ST-BY-PROTECT
IC331 TDA4555 CHROMA-DECODER
D341 1SS133 FORCE SW
D331 1SS133 SYSTEM SW-1
D333 1SS133 SYSTEM SW-2
Q306 JC501 HUE BUFF
Q332 DTC124ES 3.58M SW
Q333 DTC124ES 4.43M SW
X331 7.16MHz
X332 8.86MHz
3.58MHz
4.43MHz
Q334 JC501 CHROMA-OUT
Q335 JC501 CHROMA-OUT
Q331 JC501 COUT-3
DL331
DL332
BELL
T331
SECAM ID
Q302 JC501 VIDEO-BUFF
Q336 JC501 VIDEO-AMP
Q1306 JA101 Y-BUFF
B
(Y.CHROMA)
HUE
VIDEO IN
GND
+BLK
CHR
ABL
MUTE
GND
P2N
12V
SCP
R IN
G IN
B IN
BLK1
STBY
SCL
SDA
CNB31
TO D BOARD CND31
12V
B
G
R
GND
A.C
CNB72
TO C BOARD CNC72
12V
Q106 JC501 BUFF-AMP
Q107 JA101 BUFF-AMP
CF101 TRAP 5.5MHz
IC101 TDA3541 VIF
T101
T102
TV AGC
SEPARATION
TDA6600-2 SIF-FMID
H FREQ
IC104 TDA2595 SYNC-SEP
Q113 JC501 AF-BUFF-R
Q112 JC501 AF-BUFF-L
L111 100μH
A
(SIGNAL.TUNER BAND SW)

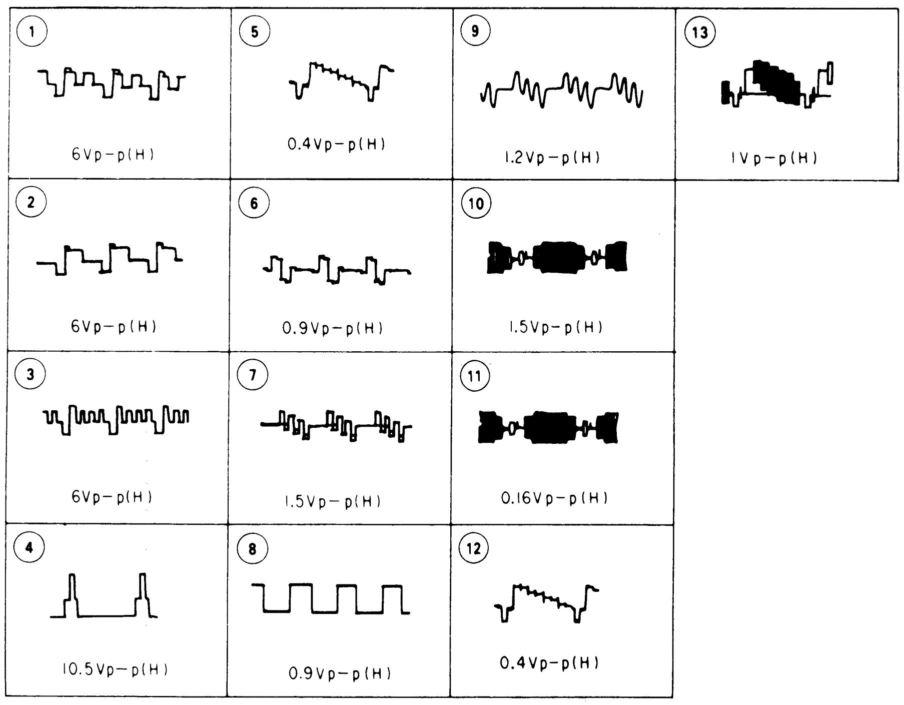
B BOARD IC302 TDA8442


DIGITAL-TO-ANALOGUE CONVERTER DAC0
DIGITAL-TO-ANALOGUE CONVERTER DAC1
DIGITAL-TO-ANALOGUE CONVERTER DAC2
DIGITAL-TO-ANALOGUE CONVERTER DAC3
POWER-DOWN DETECTOR
DACX
POD
I²C BUS SLAVE RECEIVER
OUTPUT PORT P2
OUTPUT PORT P2N
OUTPUT PORT P1

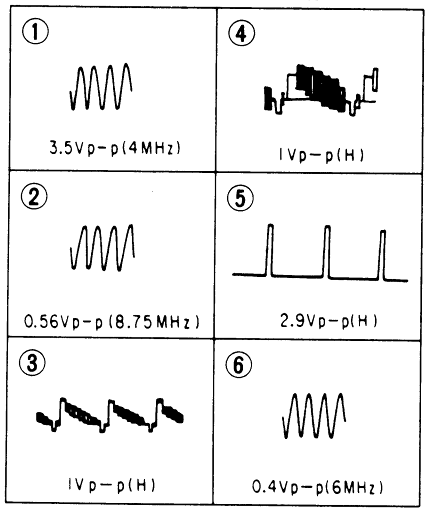
B BOARD IC331 TDA4555

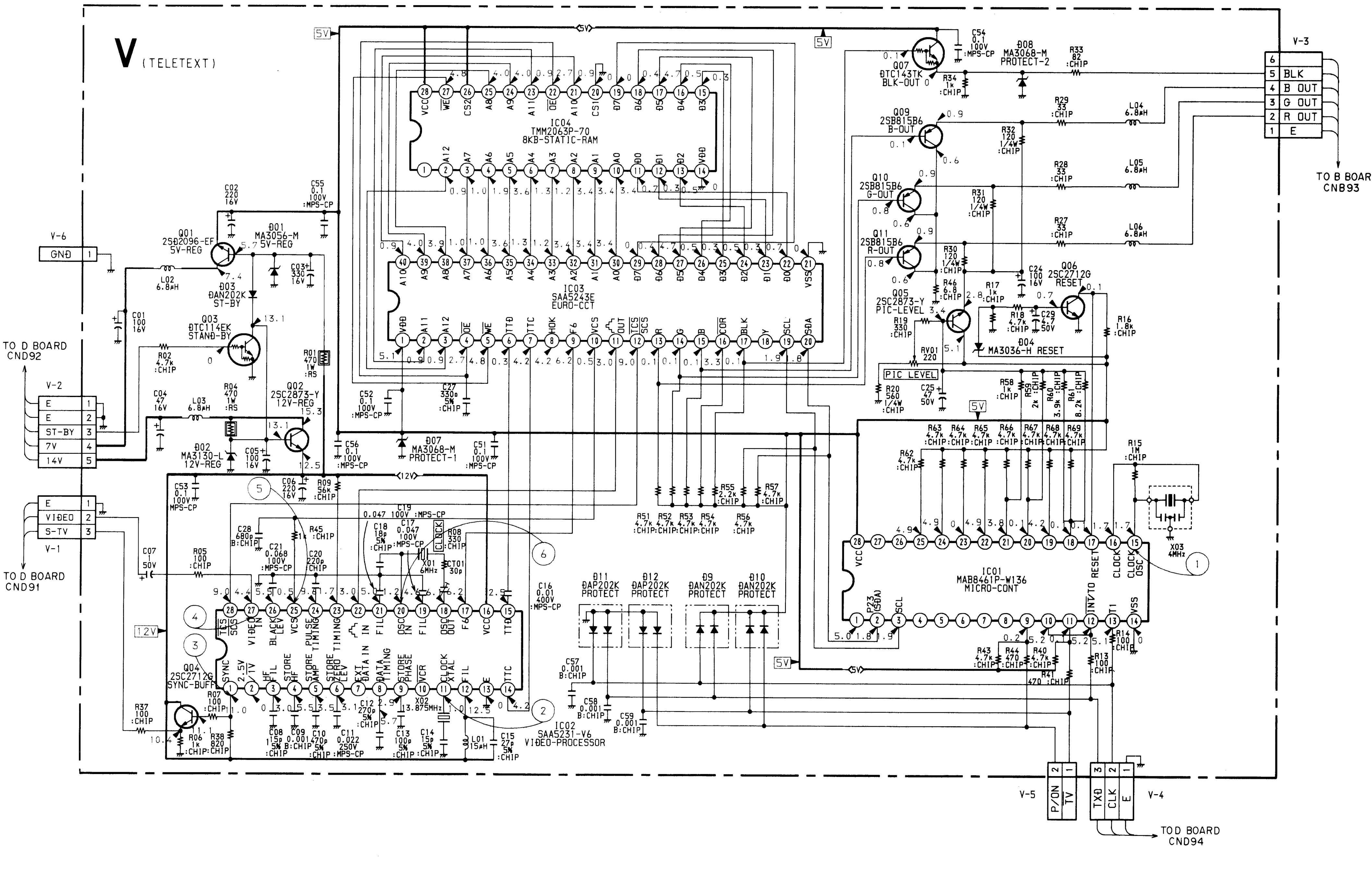

DC FEED 8
ACC
ACC DEMOD
DL AMP DRIVER
BURST BLANK
MATRIX SECAM LIMITER PERMULATOR
SECAM REF
DEMOD
SECAM DEEMPH BLANKING COLOR KILLER
PAL/NTSC
SECAM V/H/V+H
IDENT
SYSTEM CONTROL STANDARD SCANNING
FORCED STANDARD SETTING
HUE NTSC ± 30°
SERVICE
2f osc PAL/NTSC DIVIDER, PLL
PULSE PROCESSING
SAND CASTLE PULSE DELECT

• B BOARD WAVEFORM



• V BOARD WAVEFORM



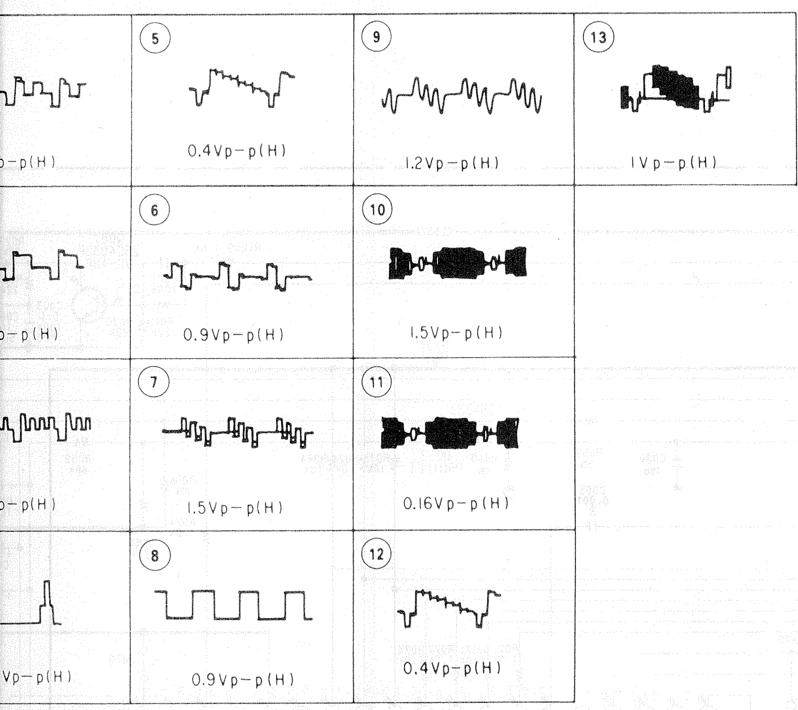

V (TELETEXT)
IC04 TMM2063P-70 8KB-STATIC-RAM
IC03 SAA5243E EURO-CCT
IC02 SAA5231-V6 VIDEO-PROCESSOR
IC01 MAB8461P-W136 MICRO-CONT
Q01 2SD2096-EF 5V-REG
D01 MA3056-M 5V-REG
D03 DAN202K ST-BY
Q03 DTC114EK STAND-BY
Q02 2SC2873-Y 12V-REG
D02 MA3130-L 12V-REG
D07 MA3068-M PROTECT-1
D08 MA3068-M PROTECT-2
Q07 DTC143TK BLK-OUT
Q09 2SB815B6 B-OUT
Q10 2SB815B6 G-OUT
Q11 2SB815B6 R-OUT
Q05 2SC2873-Y PIC-LEVEL
Q06 2SC2712G RESET
D04 MA3036-H RESET
Q04 2SC2712G SYNC-BUFF
D11 DAP202K PROTECT
D12 DAP202K PROTECT
D9 DAN202K PROTECT
D10 DAN202K PROTECT
PIC LEVEL
X01 6MHz
X02 13.875MHz
X03 4MHz
V-6 GND 1
TO D BOARD CND92
V-2 E 1 E 2 ST-BY 3 7V 4 14V 5
V-1 E 1 VIDEO 2 S-TV 3
TO D BOARD CND91
V-3 6 5 BLK 4 B OUT 3 G OUT 2 R OUT 1 E
TO B BOARD CN893
V-5 P/ON 2 TV 1
V-4 TXD 3 CLK 2 E 1
TO D BOARD CND94
5V
12V

5-4. PRINTED WIRING BOARDS

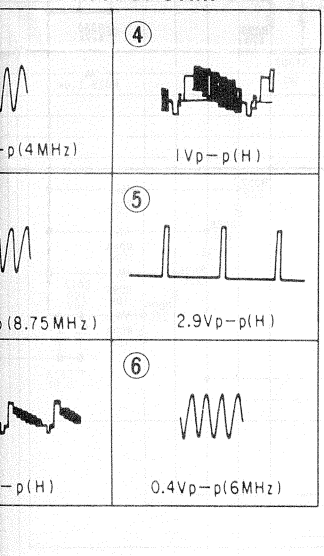
A SIGNAL TUNER, BAND SW, VIF, SIF

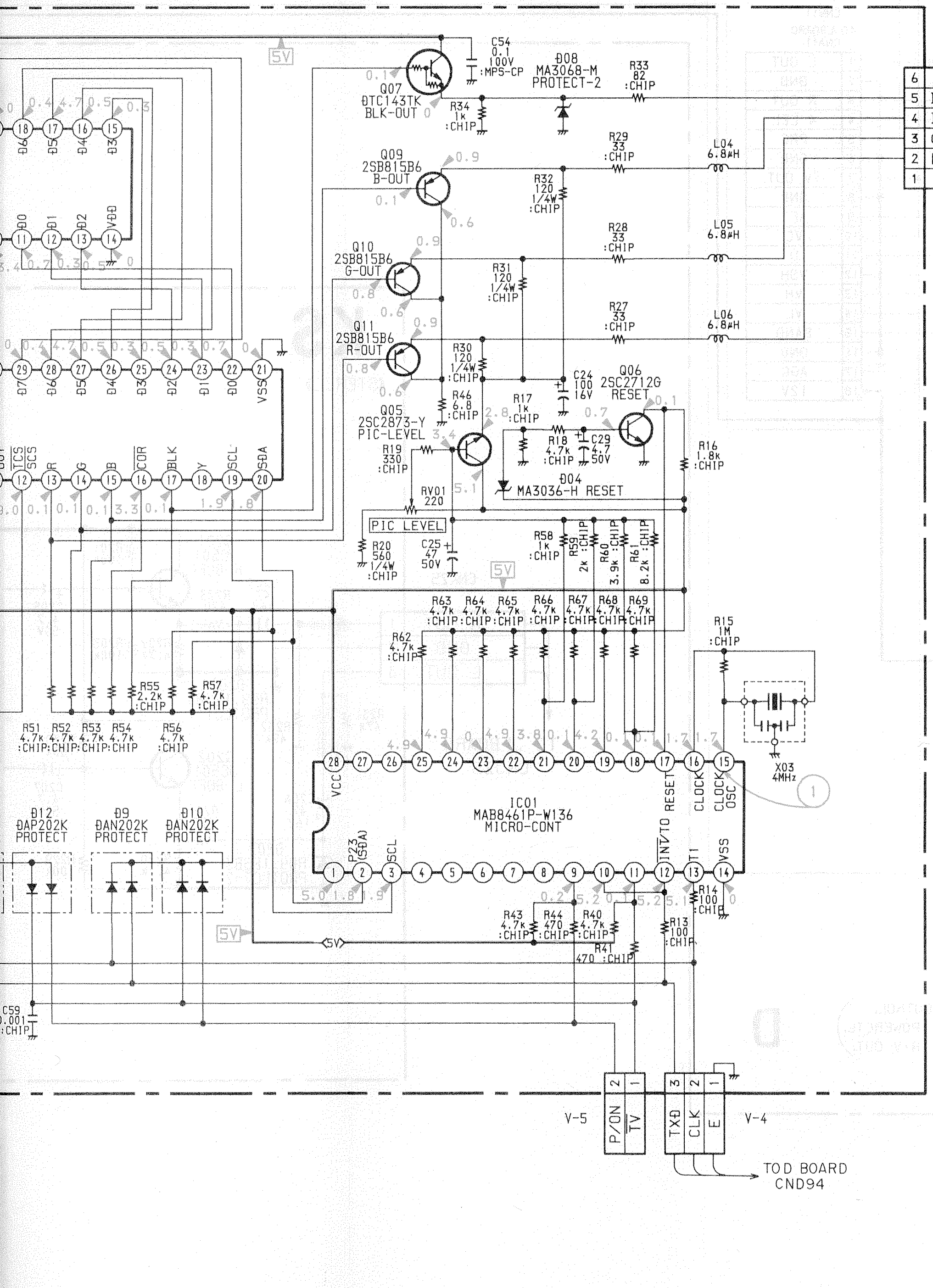
B R·G·B INTE
D/A CONVE
CHROMA D

OARD WAVEFORM

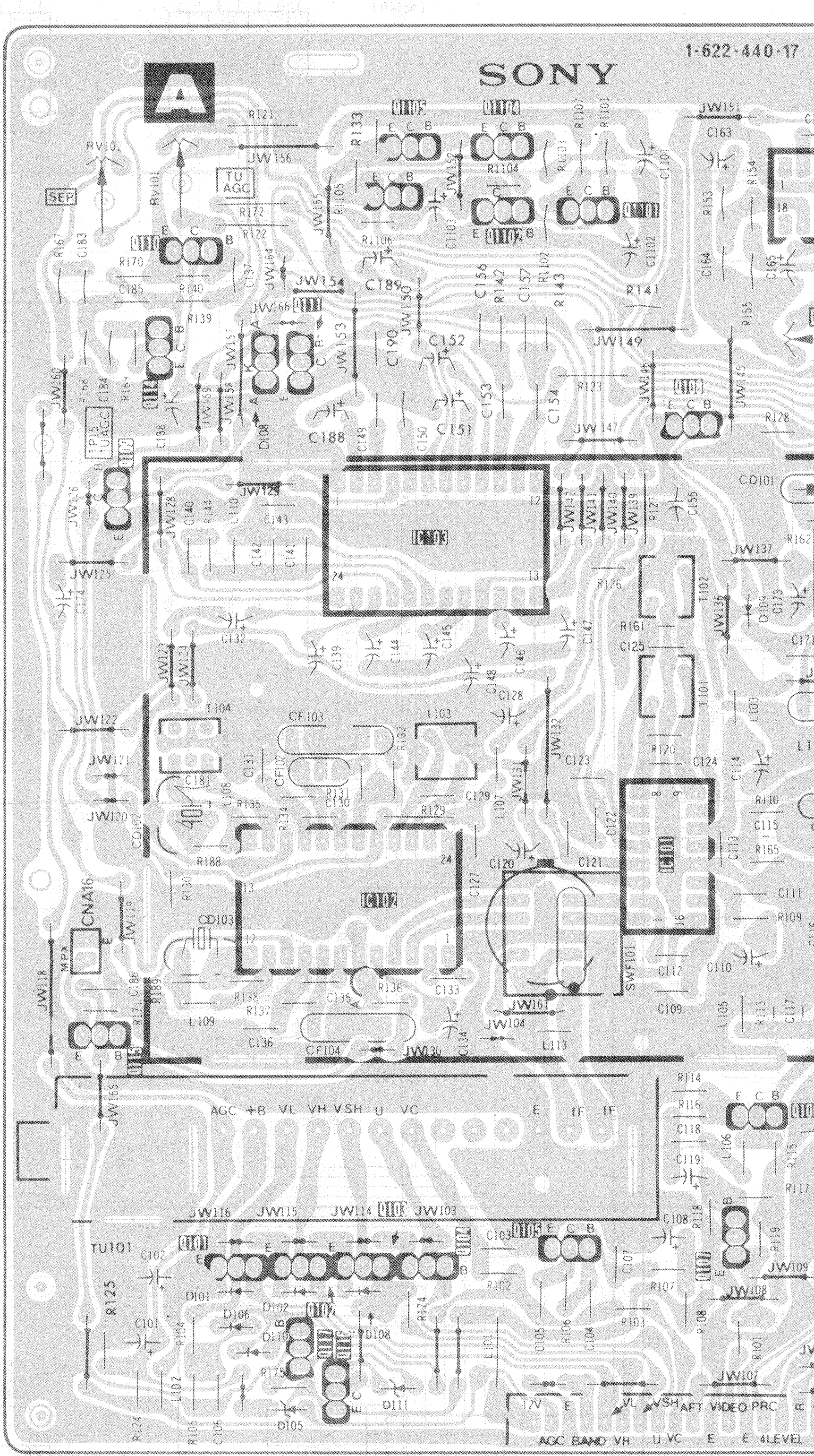


OARD WAVEFORM

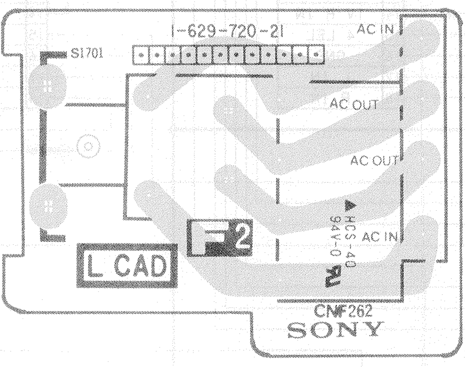



Q07 DTC143TK BLK-OUT
C54 0.1 100V :MPS-CP
D08 MA3068-M PROTECT-2
R33 82 :CHIP
R34 1k :CHIP
Q09 2SB815B6 B-OUT
Q10 2SB815B6 G-OUT
Q11 2SB815B6 R-OUT
R29 33 :CHIP
R32 120 1/4W :CHIP
R28 33 :CHIP
R31 120 1/4W :CHIP
R27 33 :CHIP
R30 120 1/4W :CHIP
L04 6.8µH
L05 6.8µH
L06 6.8µH
V-3
6
5 BLK
4 B OUT
3 G OUT
2 R OUT
1 E
TO B BOARD CNB93
C24 100 16V
Q06 2SC2712G RESET
R46 6.8 :CHIP
R17 1k :CHIP
Q05 2SC2873-Y PIC-LEVEL
R18 4.7k :CHIP
C29 4.7 50V
R16 1.8k :CHIP
R19 330 :CHIP
RV01 220
D04 MA3036-H RESET
PIC LEVEL
R20 560 1/4W :CHIP
C25 47 50V
R58 1k :CHIP
R59 2k :CHIP
R60 3.9k :CHIP
R61 8.2k :CHIP
5V
R63 4.7k :CHIP
R64 4.7k :CHIP
R65 4.7k :CHIP
R66 4.7k :CHIP
R67 4.7k :CHIP
R68 4.7k :CHIP
R69 4.7k :CHIP
R62 4.7k :CHIP
R15 1M :CHIP
R55 2.2k :CHIP
R57 4.7k :CHIP
R51 R52 R53 R54 4.7k 4.7k 4.7k 4.7k :CHIP :CHIP :CHIP :CHIP
R56 4.7k :CHIP
X03 4MHz
IC01 MAB8461P-W136 MICRO-CONT
VCC
P23 (SDA)
SCL
INT/T0
RESET
CLOCK
CLOCK OSC
T1
VSS
D12 DAP202K PROTECT
D9 DAN202K PROTECT
D10 DAN202K PROTECT
R43 4.7k :CHIP
R44 470 :CHIP
R40 4.7k :CHIP
R41 470 :CHIP
R13 100 :CHIP
R14 100 :CHIP
C59 0.001 :CHIP
BLK
R
G
B
COR
Y
SCL
SDA
VSS
VDD
V-5
P/ON
TV
V-4
TXD
CLK
E
TOD BOARD CND94

– A Board –


A
SONY
1-622-440-17
IC101
IC102
IC103
TU101
CNA16
SEP
TU AGC
AGC +B VL VH VSH U VC E IF IF
AGC BAND VH U VC E E 4LEVEL
17V
VL VSH AFT VIDEO PRC

– F2 Board –


S1701
1-629-720-21
AC IN
AC OUT
AC OUT
AC IN
L CAD
F2
CNF262
SONY

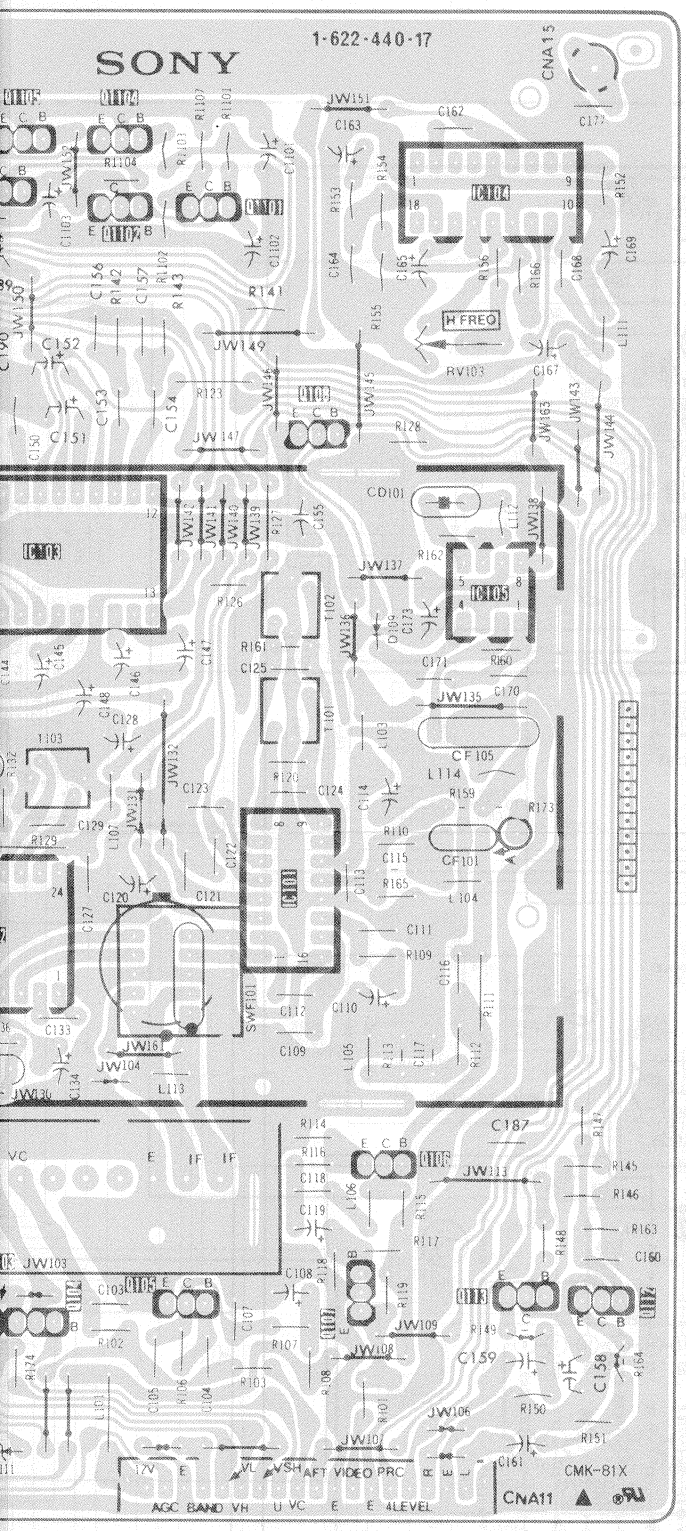
NAL TUNER,
ND SW, VIF, SIF

B R·G·B INTERFACE, D/A CONVERTER, CHROMA DECODER

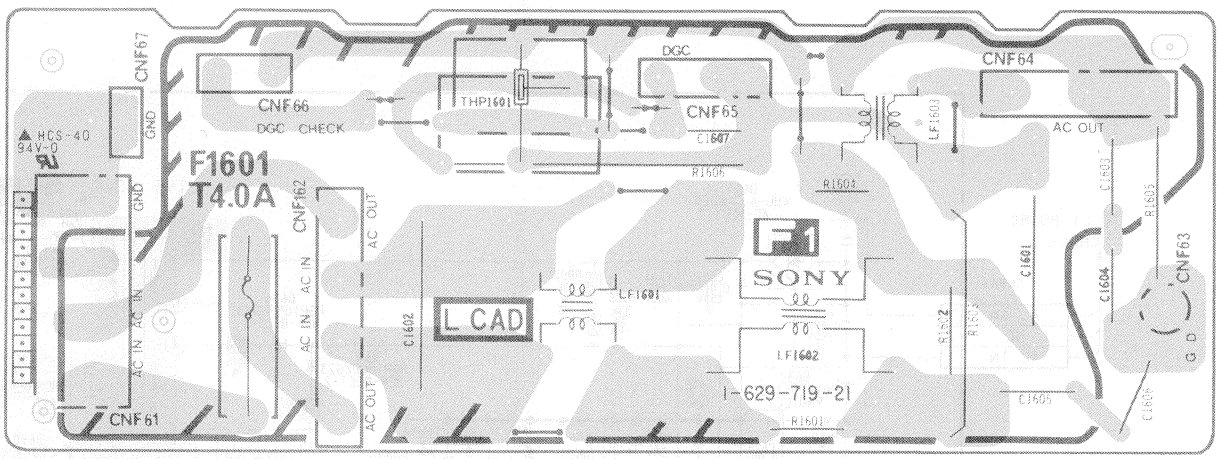
F1 [LINE FILTER]

F2

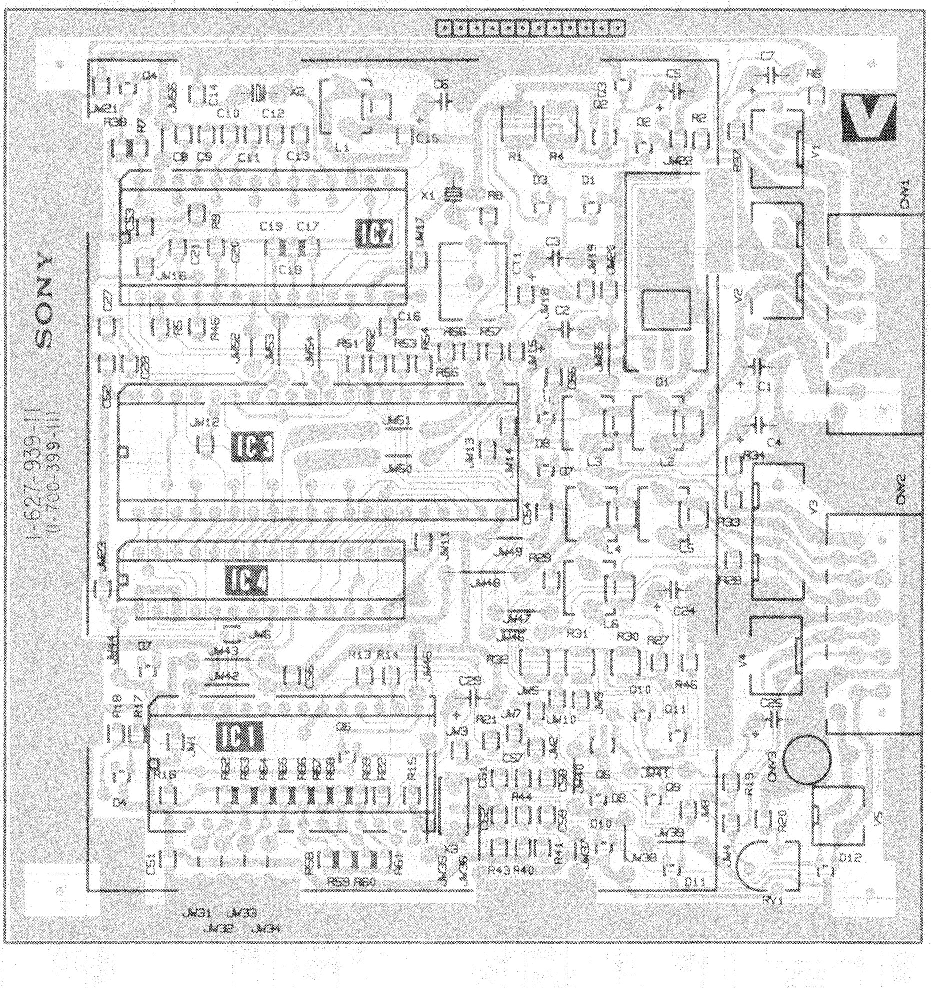
V [TELETEXT]


SONY
1-622-440-17
IC104
IC103
IC105
IC101
CMK-81X
CNA11
CNA15

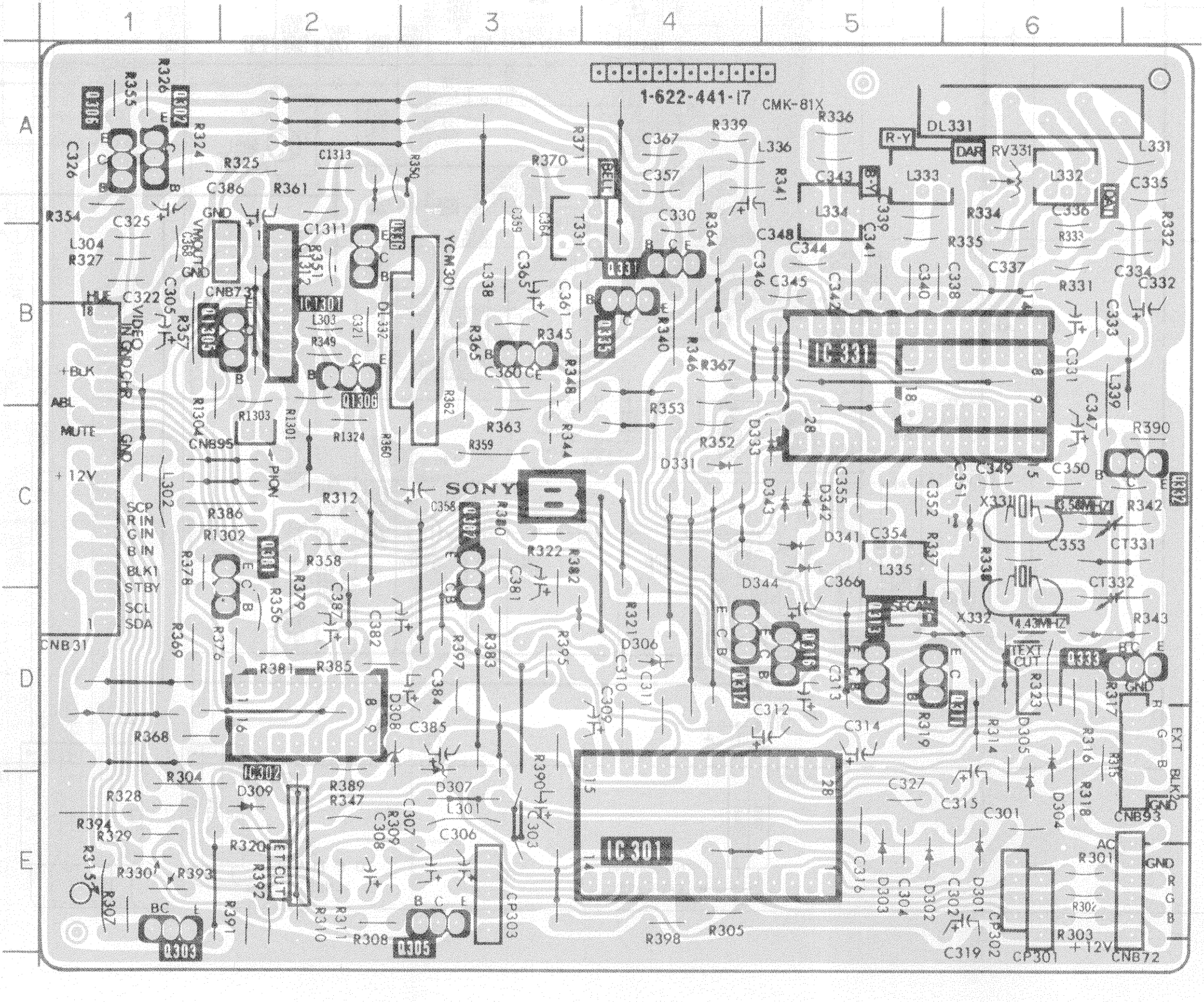
– F1 Board –


F1601
T4.0A
CNF66
DGC CHECK
CNF65
CNF64
CNF67
CNF61
CNF63
CNF162
LF1601
LF1602
L CAD
SONY
F1
AC OUT
AC IN
1-629-719-21
HCS-40

– V Board –


SONY
V
IC1
IC2
IC3
IC4
1-627-939-11
(1-700-399-11)
CNV1
CNV2

– B Board –


1
2
3
4
5
6
A
B
C
D
E
1-622-441-17
CMK-81X
SONY
B
IC331
IC301
IC1301
CNB31
CNB72
CNB93

IC	
IC301	E-4
IC302	D-2
IC331	B-5

TRANSISTOR	
Q302	A-1
Q303	E-1
Q305	E-3
Q306	A-1
Q311	D-5
Q312	D-4
Q313	D-5
Q316	D-5
Q331	B-4
Q332	C-6
Q333	D-6
Q334	B-3
Q335	B-4
Q336	B-2
Q381	C-2
Q382	C-3
Q1316	B-2

DIODE	
D301	E-6
D302	E-5
D303	E-5
D304	E-6
D305	E-6
D307	E-3
D309	E-2
D331	C-4
D333	C-5
D341	C-5

VARIABLE RESISTOR	
RV331	A-6
CT331	C-6
CT332	D-6

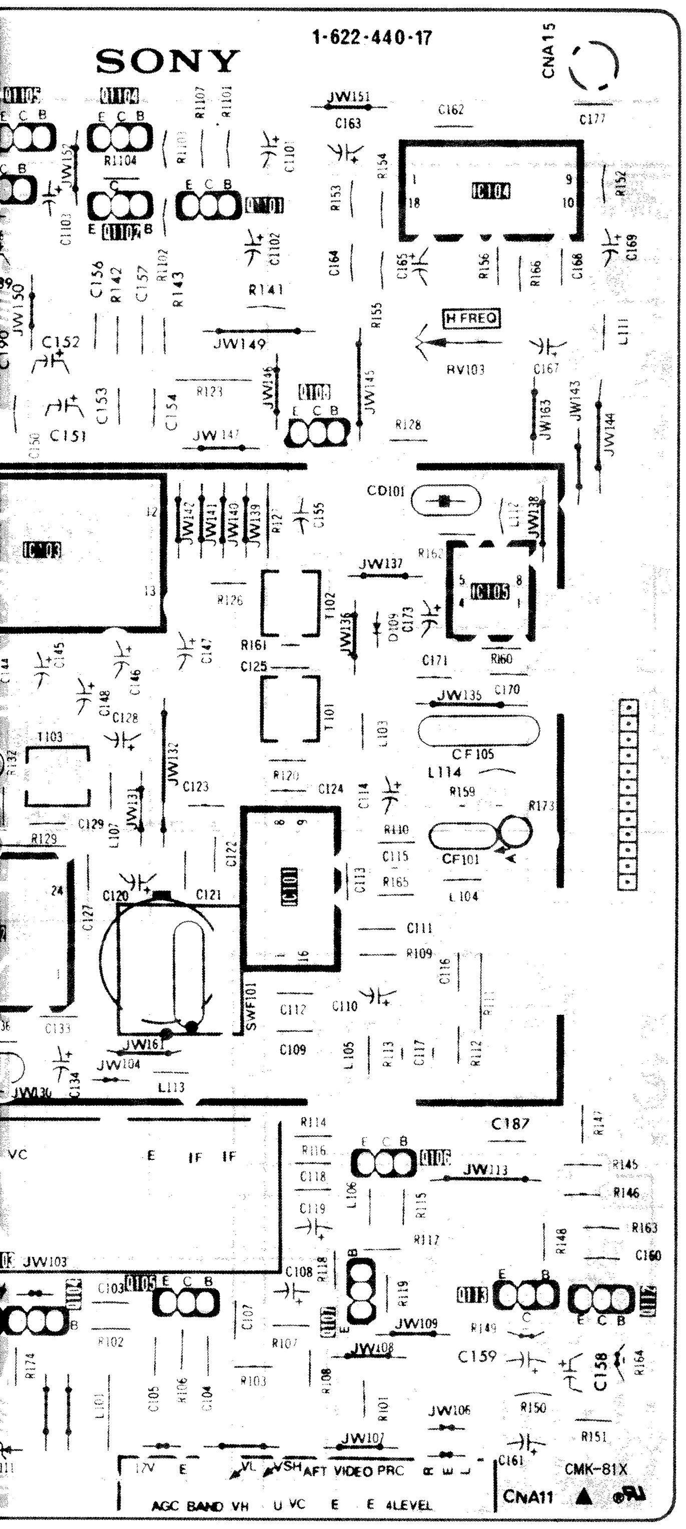
NAL TUNER,
ND SW, VIF, SIF]

B [R·G·B INTERFACE,
D/A CONVERTER,
CHROMA DECODER]

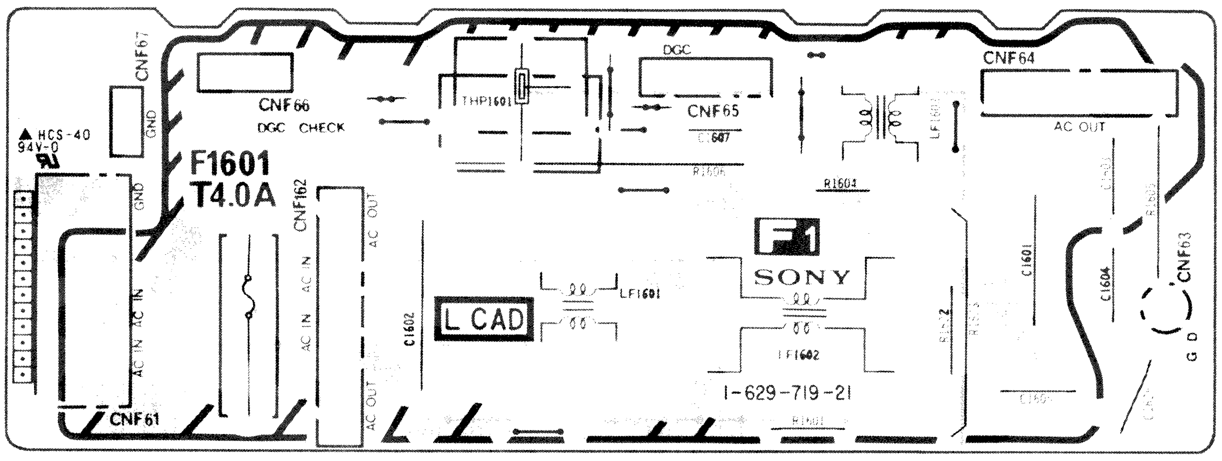
F1 [LINE FILTER]

F2

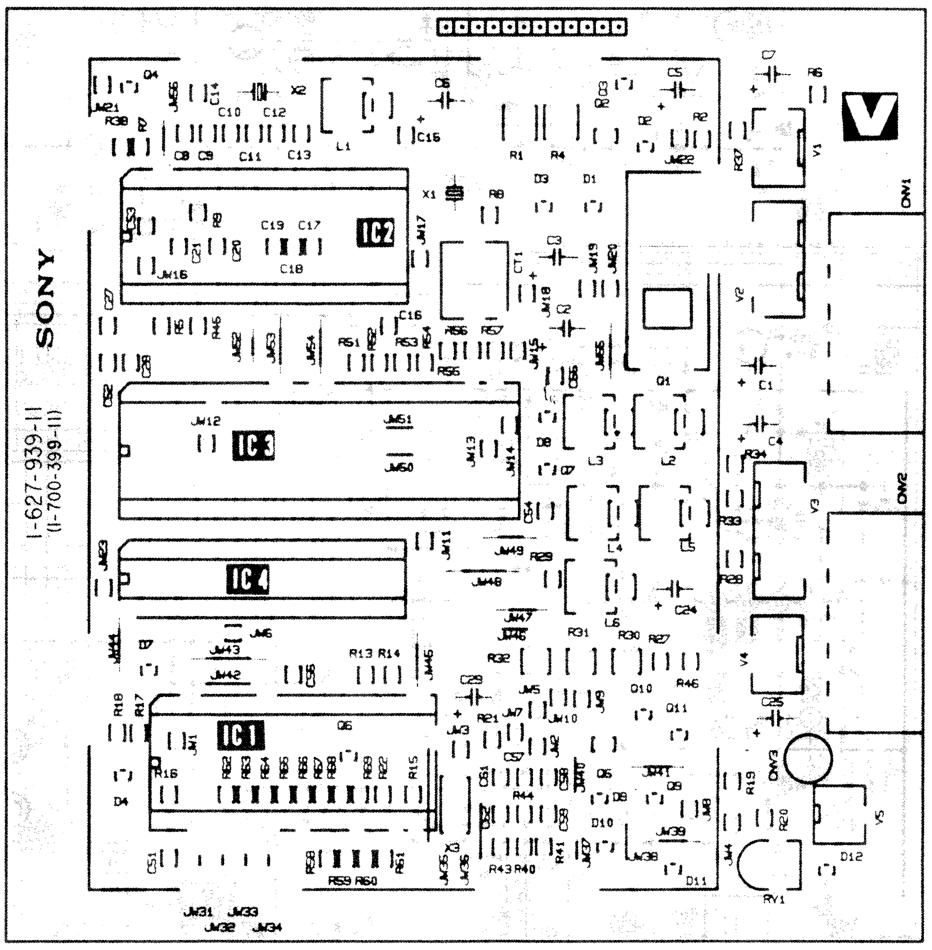
V [TELETEXT]


SONY
1-622-440-17
CNA15
IC101
IC103
IC104
IC105
CF101
CF105
CD101
SWF101
H FREQ
RV103
CMK-81X
CNA11
AGC BAND VH U VC E E 4LEVEL
12V E VL VSH AFT VIDEO PRC

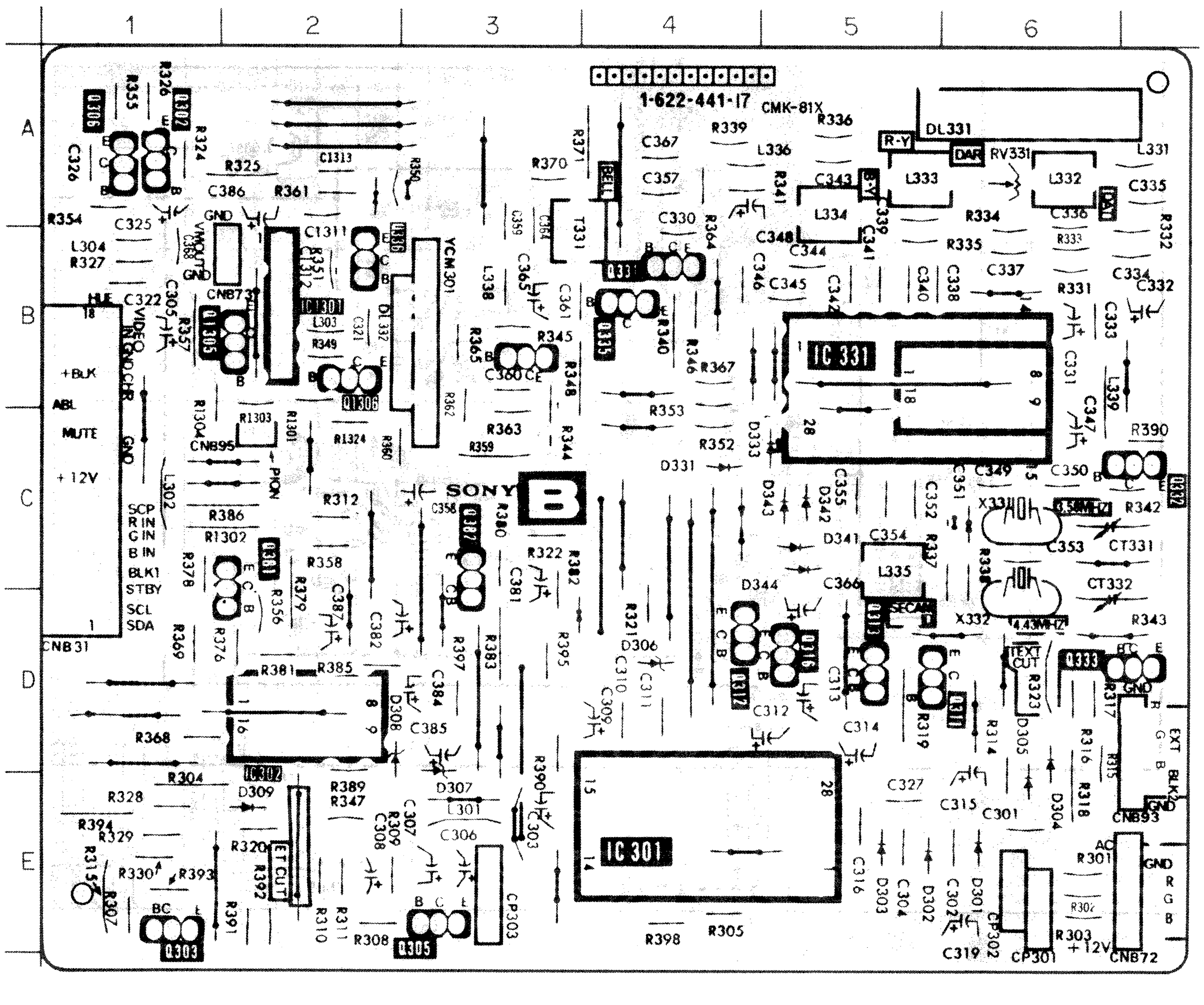
– F1 Board –


CNF67
CNF66
DGC CHECK
DGC
THP1601
CNF65
CNF64
AC OUT
HCS-40
94V-0
F1601
T4.0A
CNF62
AC IN
L CAD
LF1601
LF1602
F1
SONY
1-629-719-21
CNF61
CNF63
C1601
C1602
C1604
R1604
G D

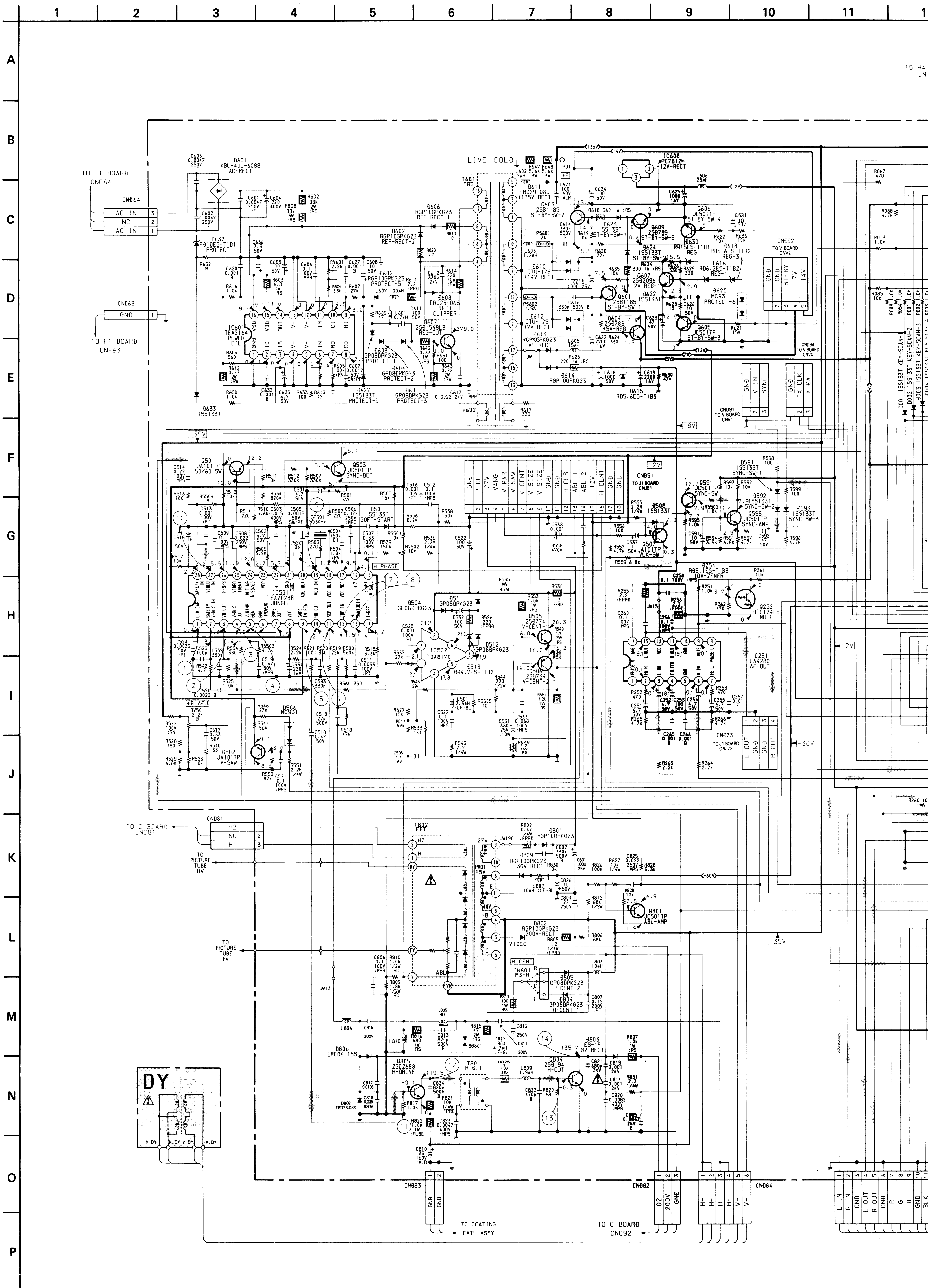
– V Board –


V
SONY
1-627-939-11
(1-700-399-11)
IC1
IC2
IC3
IC4
CN1
CN2
V1
V2
V3
V4
X1
X2
RV1

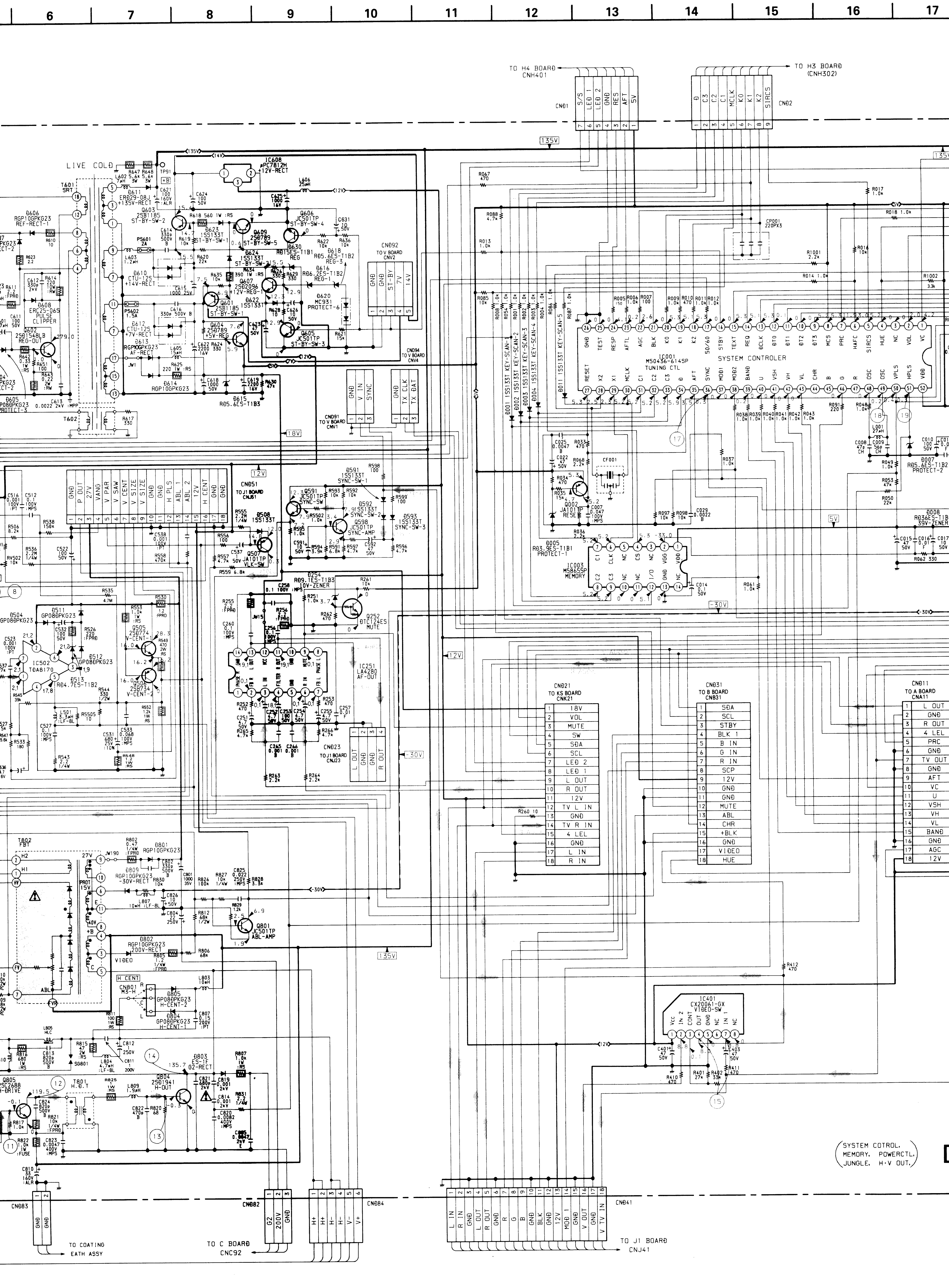
– B Board –


1
2
3
4
5
6
A
B
C
D
E
1-622-441-17
CMK-81X
IC 301
IC 302
IC 331
IC1301
SONY
B
CNB31
+BLK
ABL
MUTE
+12V
GND
SCP
R IN
G IN
B IN
BLK1
STBY
SCL
SDA
RV331
DL331
R-Y
YCM301
CNB72
CNB93
CNB95
CNB73
EXT
BLK
12V
CP301
CP302
CP303
X331
X332
4.43MHz

IC		DIODE	
IC301	E-4	D301	E-6
IC302	D-2	D302	E-5
IC331	B-5	D303	E-5
		D304	E-6
TRANSISTOR		D305	E-6
Q302	A-1	D307	E-3
Q303	E-1	D309	E-2
Q305	E-3	D331	C-4
Q306	A-1	D333	C-5
Q311	D-5	D341	C-5
Q312	D-4	**VARIABLE RESISTOR**	
Q313	D-5		
Q316	D-5		
Q331	B-4	RV331	A-6
Q332	C-6		
Q333	D-6	CT331	C-6
Q334	B-3	CT332	D-6
Q335	B-4		
Q336	B-2		
Q381	C-2		
Q382	C-3		
Q1316	B-2		



TO F1 BOARD CNF64
CN064
AC IN
NC
AC IN
CN063
GND
TO F1 BOARD CNF63
D601 KBU-4JL-6088 AC-RECT
IC601 TEA2164 POWER CTL
LIVE COLD
T601 SRT
T602
IC608 µPC7812H +12V-RECT
Q603 2SB1185 ST-BY-SW-2
Q606 JC501TP ST-BY-SW-4
Q609 2SD789 ST-BY-SW-5
Q601 2SB1185 ST-BY-SW-1
Q604 2SD789 +5V-REG
Q605 JC501TP ST-BY-SW-3
Q602 2SD1548LB REG-OUT
D608 ERC25-06S PULSE CLIPPER
CN092 TO V BOARD CNV2
GND
GND
ST-BY
7V
14V
CN094 TO V BOARD CNV4
CN091 TO V BOARD CNV1
GND
V IN
SYNC
TX CLK
TX DAT
135V
18V
12V
Q501 JA101TP 50/60-SW
Q503 JC501TP SYNC-DET
IC501 TEA2028B JUNGLE
H PHASE
CN051 TO J1 BOARD CNJ51
GND
P OUT
27V
VANG
V PAR
V SAW
V CENT
V SIZE
V SIZE
GND
GND
H PLS
ABL 1
ABL 2
12V
H CENT
GND
GND
Q508 1SS133T
Q507 JA101TP VLK-SW
Q591 JC501TP SYNC-SW
Q598 JC501TP SYNC-AMP
IC502 TDA8170
Q505 2SD774 V-CENT-1
Q506 2SB734 V-CENT-2
Q502 JA101TP V-SAW
+B ADJ
Q252 DTC124ES MUTE
IC251 LA4280 AF-OUT
CN023 TO J1 BOARD CNJ23
L OUT
GND
GND
R OUT
-30V
TO C BOARD CNC81
CN081
H2
NC
H1
TO PICTURE TUBE HV
TO PICTURE TUBE FV
T802 FBT
VIDEO
H CENT
CN801 M3-H
Q801 JC501TP ABL-AMP
Q805 2SC2688 H-DRIVE
T801 H.D.T
Q804 2SD1941 H-OUT
DY
H. DY
V. DY
CN083
CN082
CN084
GND
GND
G2
200V
GND
H+
H+
H-
H-
V-
V+
TO COATING EATH ASSY
TO C BOARD CNC92
TO H4 CN
L IN
R IN
GND
L OUT
R OUT
GND
R
G
B
GND
BLK


6
7
8
9
10
11
12
13
14
15
16
17
TO H4 BOARD CNH401
CN01
S/S
LED 1
LED 2
GND
RES
AFT
5V
TO H3 BOARD (CNH302)
CN02
D
C3
C2
C1
MCLK
K0
K1
K2
SIRCS
135V
LIVE COLD
T601 SRT
IC608 μPC7812H +12V-RECT
Q603 2SB1185 ST-BY-SW-2
Q623 1SS133T ST-BY-SW-1
Q609 2SD789 ST-BY-SW-5
Q606 JC501TP ST-BY-SW-4
Q630 R01ES-T1B1 REG
D618 R05.6ES-T1B2 REG-3
D616 R06.2ES-T1B2 REG-1
D620 MC931 PROTECT-6
D610 CTU-12S +14V-RECT
D612 CTU-12S +7V-RECT
D613 RGP10GPKG23 AF-RECT
D614 RGP10GPKG23
D615 R05.6ES-T1B3
Q601 2SB1185 ST-BY-SW-1
Q604 2SD789 +5V-REG
Q607 2SD2096 +12V-REG-1
Q622 1SS133T
Q605 JC501TP ST-BY-SW-3
CN092 TO V BOARD CNV2
GND
GND
ST-BY
7V
14V
CN094 TO V BOARD CNV4
CN091 TO V BOARD CNV1
GND
V IN
SYNC
TX CLK
TX BAT
D606 RGP10GPKG23 REF-RECT-1
D608 ERC25-06S PULSE CLIPPER
Q602 2SD1548LB REG-OUT
D605 RGP10GPKG23 PROTECT-3
T602
18V
12V
CN051 TO J1 BOARD CNJ51
GND
P OUT
27V
VANG
V PAR
V SAW
V CENT
V SIZE
V SIZE
GND
H PLS
ABL 1
ABL 2
12V
H CENT
GND
GND
D591 1SS133T SYNC-SW-1
Q591 JC501TP SYNC-SW
D592 1SS133T SYNC-SW-2
Q598 JC501TP SYNC-AMP
D593 1SS133T SYNC-SW-3
D508 1SS133T
Q507 JA101TP VLK-SW
D254 R09.1ES-T1B3 10V-ZENER
Q252 DTC124ES MUTE
IC251 LA4280 AF-OUT
CN023 TO J1 BOARD CNJ23
L OUT
GND
GND
R OUT
-30V
D511 GP08DPKG23
D504 GP08DPKG23
D512 GP08DPKG23
IC502 TDA8170
D513 R04.7ES-T1B2
Q505 2SD774 V-CENT-1
Q506 2SB734 V-CENT-2
IC001 M50436-614SP SYSTEM CONTROLER TUNING CTL
GND
TEST
RESP
AFTL
AGC
BLK
K0
K1
K2
50/60
STBY
TEXT
REQ
DCLK
DT0
DT1
DT2
DT3
MCS
PRC
HAFC
SIRCS
HUE
NC
VOL
VC
RESET
X2
X1
MCLK
C1
C2
C3
D
AFT
SYNC
MOD1
MOD2
BAND
U
VSH
VH
VL
CHR
R
G
B
OSC
OSC
VPLS
HPLS
VDD
D001 1SS133T KEY-SCAN-1
D002 1SS133T KEY-SCAN-2
D003 1SS133T KEY-SCAN-3
D004 1SS133T KEY-SCAN-4
D011 1SS133T KEY-SCAN-5
CP001 220PX3
CF001
Q002 JA101TP RESET
D005 R03.9ES-T1B1 PROTECT-1
IC003 M58655P MEMORY
D007 R05.6ES-T1B2 PROTECT-2
D008 R036ES-T1B 39V-ZENER
5V
CN021 TO KS BOARD CNK21
CN031 TO B BOARD CNB31
CN011 TO A BOARD CNA11
T802 FBT
D801 RGP10GPKG23
D809 RGP10GPKG23 -30V-RECT
Q801 JC501TP ABL-AMP
D802 RGP10GPKG23 200V-RECT
VIDEO
H CENT
CN801 M3-H
D805 GP08DPKG23 H-CENT-2
D804 GP08DPKG23 H-CENT-1
D803 ES-1F G2-RECT
Q805 2SC2688 H-DRIVE
T801 H.D.T
Q804 2SD1941 H-OUT
IC401 CX20061-GX VIDEO-SW
Vcc
IN 2
CONT
OUT
GND
NC
IN 1
NC
CN083
GND
GND
TO COATING EATH ASSY
CN082
G2
200V
GND
TO C BOARD CNC92
CN084
H+
H+
H-
H-
V-
V+
CN041
L IN
R IN
L OUT
R OUT
GND
R
G
B
GND
BLK
GND
12V
MOD 1
GND
V OUT
GND
V TV IN
TO J1 BOARD CNJ41
(SYSTEM COTROL, MEMORY, POWERCTL, JUNGLE, H·V OUT.)

CN021 TO KS BOARD CNK21

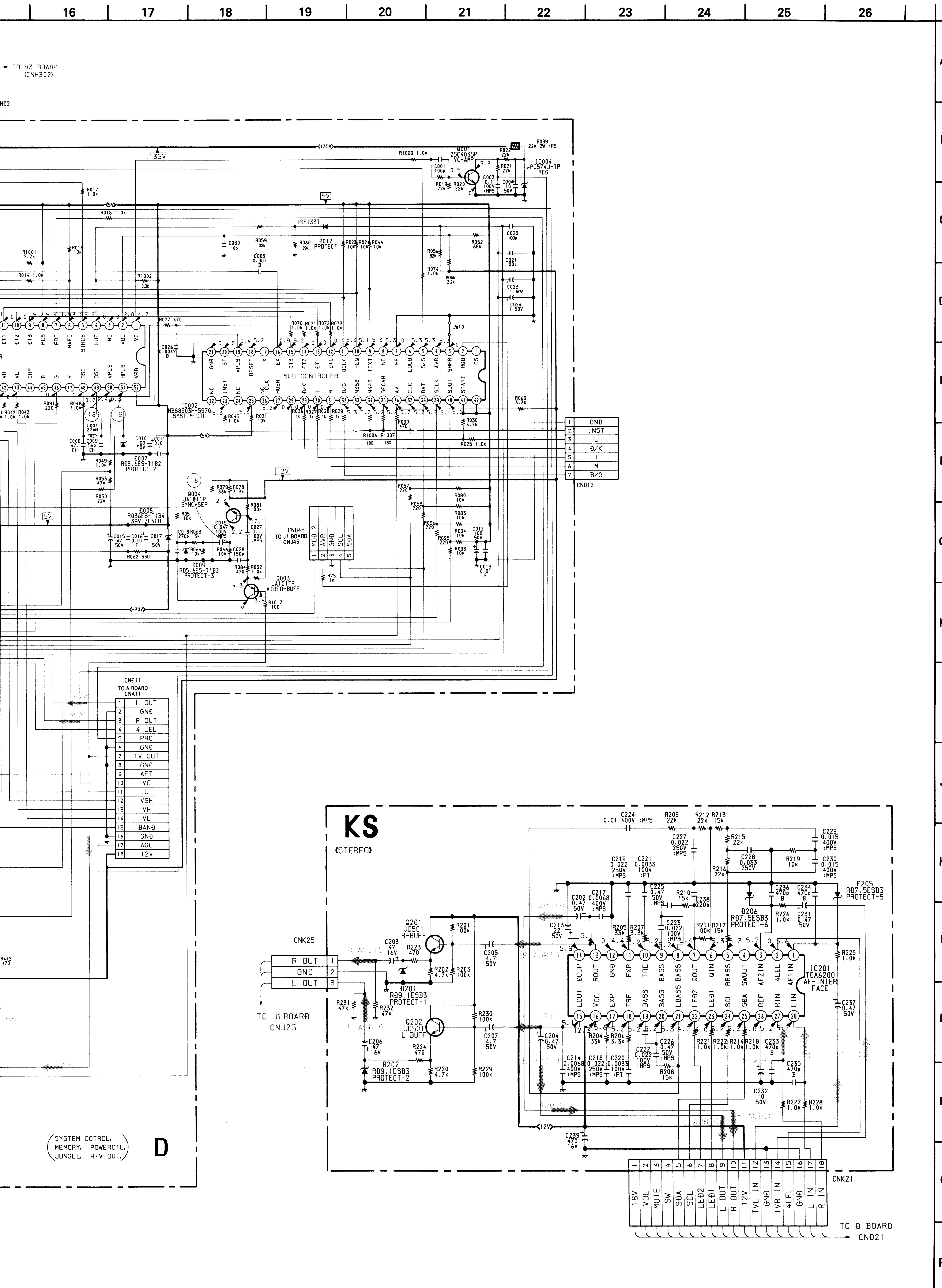
1	18V
2	VOL
3	MUTE
4	SW
5	SDA
6	SCL
7	LED 2
8	LED 1
9	L OUT
10	R OUT
11	12V
12	TV L IN
13	GND
14	TV R IN
15	4 LEL
16	GND
17	L IN
18	R IN

CN031 TO B BOARD CNB31

1	SDA
2	SCL
3	STBY
4	BLK 1
5	B IN
6	G IN
7	R IN
8	SCP
9	12V
10	GND
11	GND
12	MUTE
13	ABL
14	CHR
15	+BLK
16	GND
17	VIDEO
18	HUE

CN011 TO A BOARD CNA11

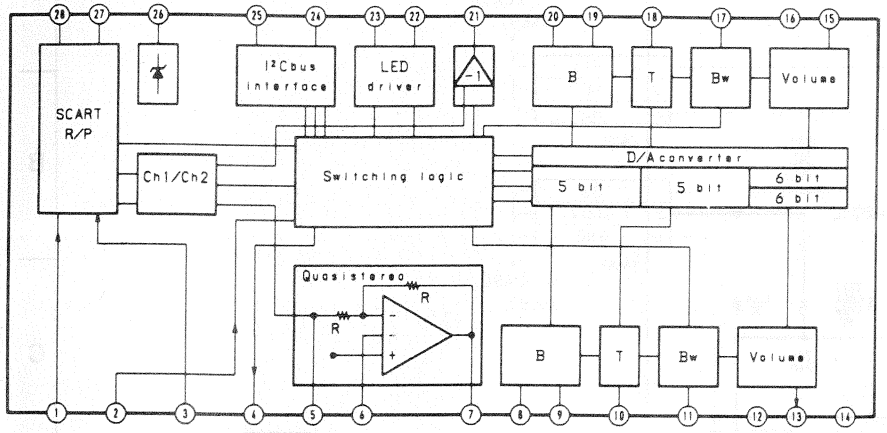
1	L OUT
2	GND
3	R OUT
4	4 LEL
5	PRC
6	GND
7	TV OUT
8	GND
9	AFT
10	VC
11	U
12	VSH
13	VH
14	VL
15	BAND
16	GND
17	AGC
18	12V


16
17
18
19
20
21
22
23
24
25
26
TO H3 BOARD (CNH302)
135V
5V
12V
30V
Q001 2SC4030SP VC-AMP
IC004 μPC574J-TP REG
R099 22k 2W :RS
1SS133T
D012 PROTECT
IC002 MB88503H-597G SYSTEM-CTL
SUB CONTROLER
GND ST VPLS RESET X EX DT3 DT2 DT1 DT0 DCLK REQ TEXT NC HF LOUD S/S AVR SHPR ROB CS
NC INST NC SCLK HUER L D/K I M B/G N358 N443 SECAM AV CLK DAT SCLK SOUT START
Q004 JA101TP SYNC-SEP
Q003 JA101TP VIDEO-BUFF
D007 R05.6ES-T1B2 PROTECT-2
D008 RD36ES-T1B4 39V-ZENER
D009 R05.6ES-T1B2 PROTECT-3
CN045 TO J1 BOARD CNJ45
1 MOD 2
2 AVR
3 GND
4 SCL
5 SDA
CN012
1 GND
2 INST
3 L
4 D/K
5 I
6 M
7 B/G
CN011 TO A BOARD CNA11
1 L OUT
2 GND
3 R OUT
4 4 LEL
5 PRC
6 GND
7 TV OUT
8 GND
9 AFT
10 VC
11 U
12 VSH
13 VH
14 VL
15 BAND
16 GND
17 AGC
18 12V
(SYSTEM COTROL. MEMORY. POWERCTL. JUNGLE. H·V OUT.)
D
KS
(STEREO)
CNK25
1 R OUT
2 GND
3 L OUT
TO J1 BOARD CNJ25
Q201 JC501 R-BUFF
Q202 JC501 L-BUFF
D201 RD9.1ESB3 PROTECT-1
D202 RD9.1ESB3 PROTECT-2
D205 RD7.5ESB3 PROTECT-5
D206 RD7.5ESB3 PROTECT-6
IC201 TDA6200 AF-INTER FACE
DCUP ROUT GND EXP TRE BASS BASS QOUT QIN RBASS SWOUT AF2IN 4LEL AF1IN
LOUT VCC EXP TRE BASS BASS LBASS LED2 LED1 SCL SDA REF RIN LIN
CNK21
1 18V
2 VOL
3 MUTE
4 SW
5 SDA
6 SCL
7 LED2
8 LED1
9 L OUT
10 R OUT
11 12V
12 TVL IN
13 GND
14 TVR IN
15 4LEL
16 GND
17 L IN
18 R IN
TO D BOARD CND21

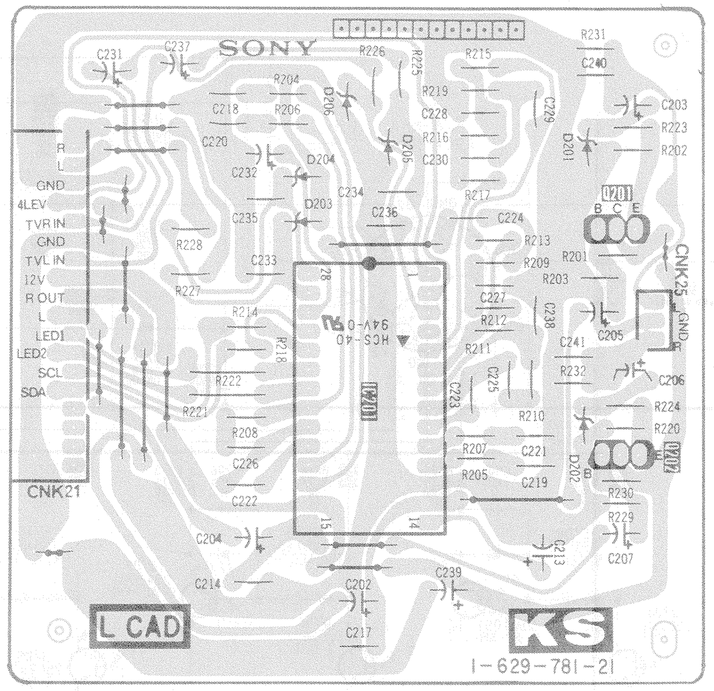
Ks [AF INTERFACE]

D [AF OUT, Y-CHROMA, JUNGLE, V-H DEF]

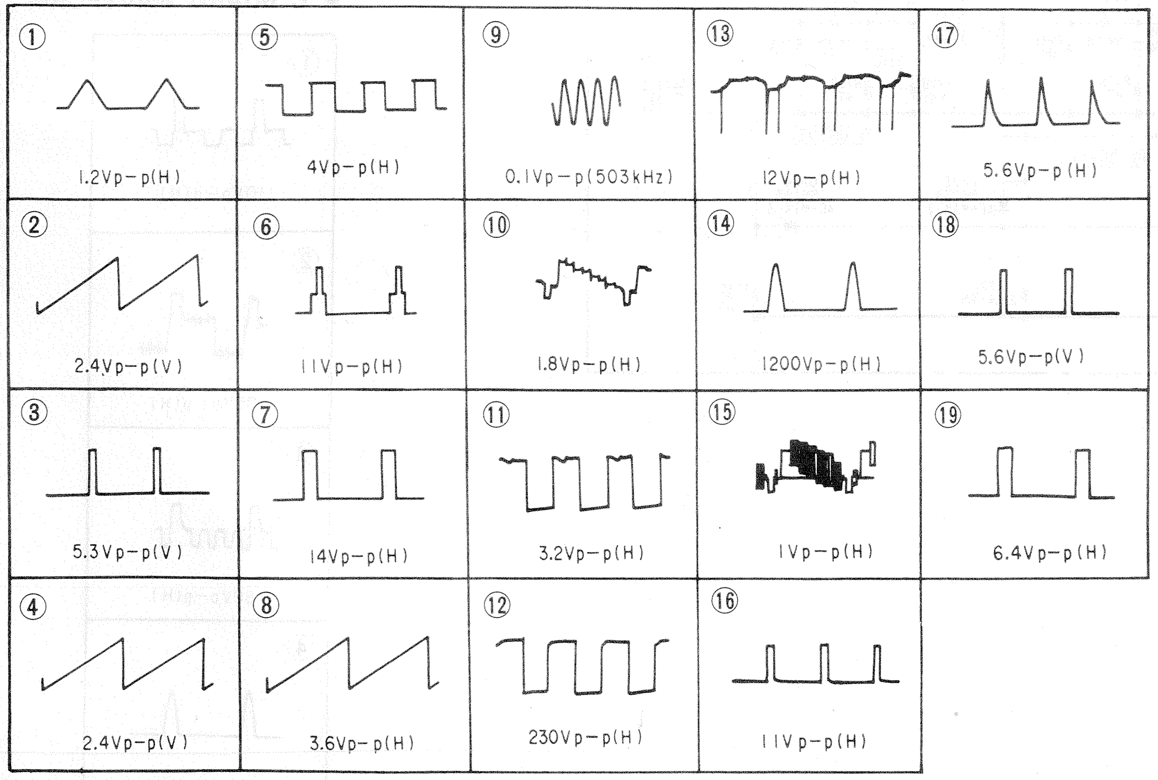
KS BOARD IC201 TDA6200


SCART R/P
Ch1/Ch2
I²Cbus interface
LED driver
Switching logic
D/A converter
5 bit
5 bit
6 bit
6 bit
B
T
Bw
Volume
Quasistereo
R
R
-1

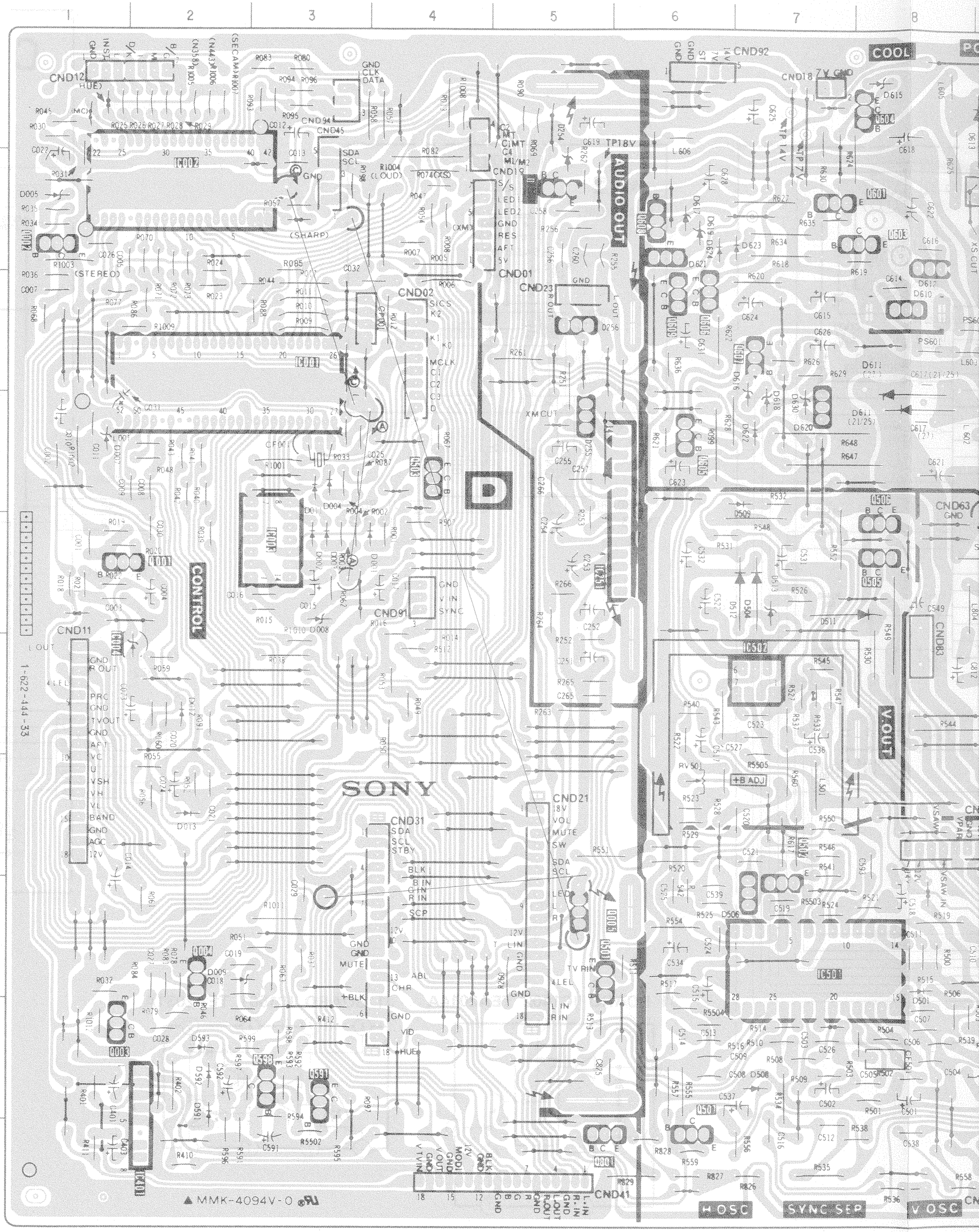
– KS Board –


SONY
CNK21
CNK25
GND
4LEV
TVR IN
GND
TVL IN
12V
R OUT
L
LED1
LED2
SCL
SDA
IC201
Q201
L CAD
KS
1-629-781-21

● D BOARD WAVEFORM



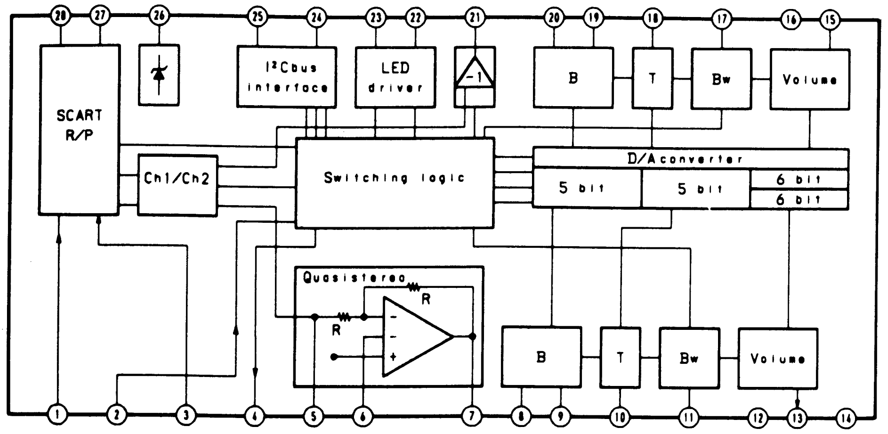
– D Board –


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
COOL
AUDIO OUT
CONTROL
V.OUT
SONY
D
IC001
IC002
CND11
CND12
CND21
CND31
CND41
CND63
CND83
CND91
CND92
H OSC
SYNC SEP
V OSC
1-622-444-33
▲MMK-4094V-0

Ks [AF INTERFACE]

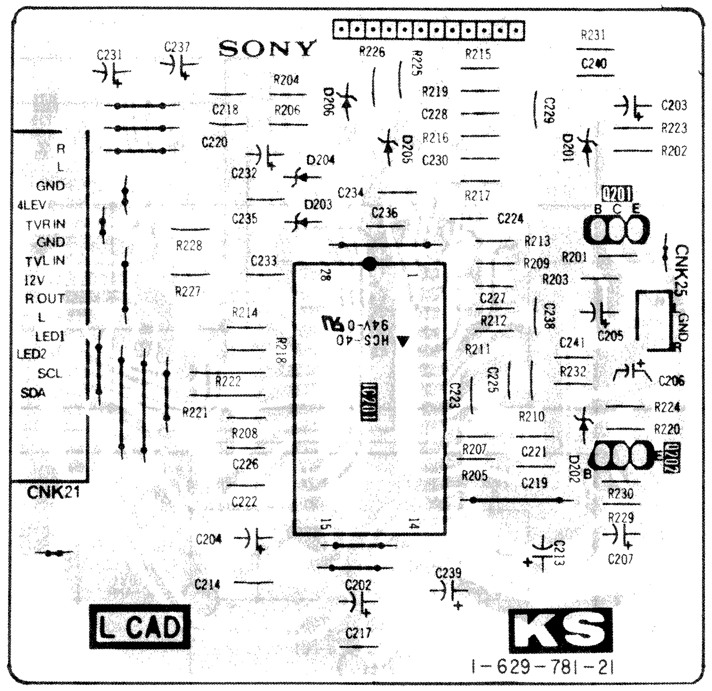
D [AF OUT, Y-CHROMA, JUNGLE, V-H DEF]

KS BOARD IC201 TDA6200



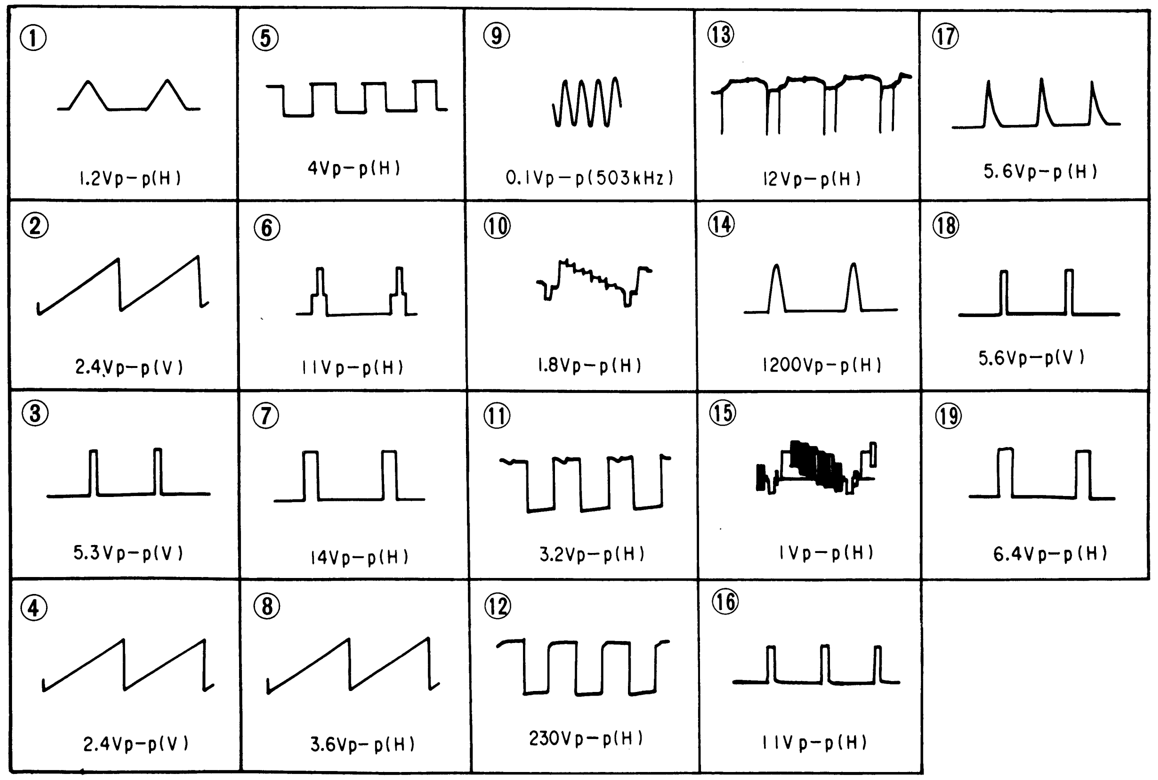
SCART R/P
Ch1/Ch2
I²Cbus interface
LED driver
B
T
Bw
Volume
Switching logic
D/A converter
5 bit
5 bit
6 bit
6 bit
Quasistereo
R
R
B
T
Bw
Volume

– KS Board –

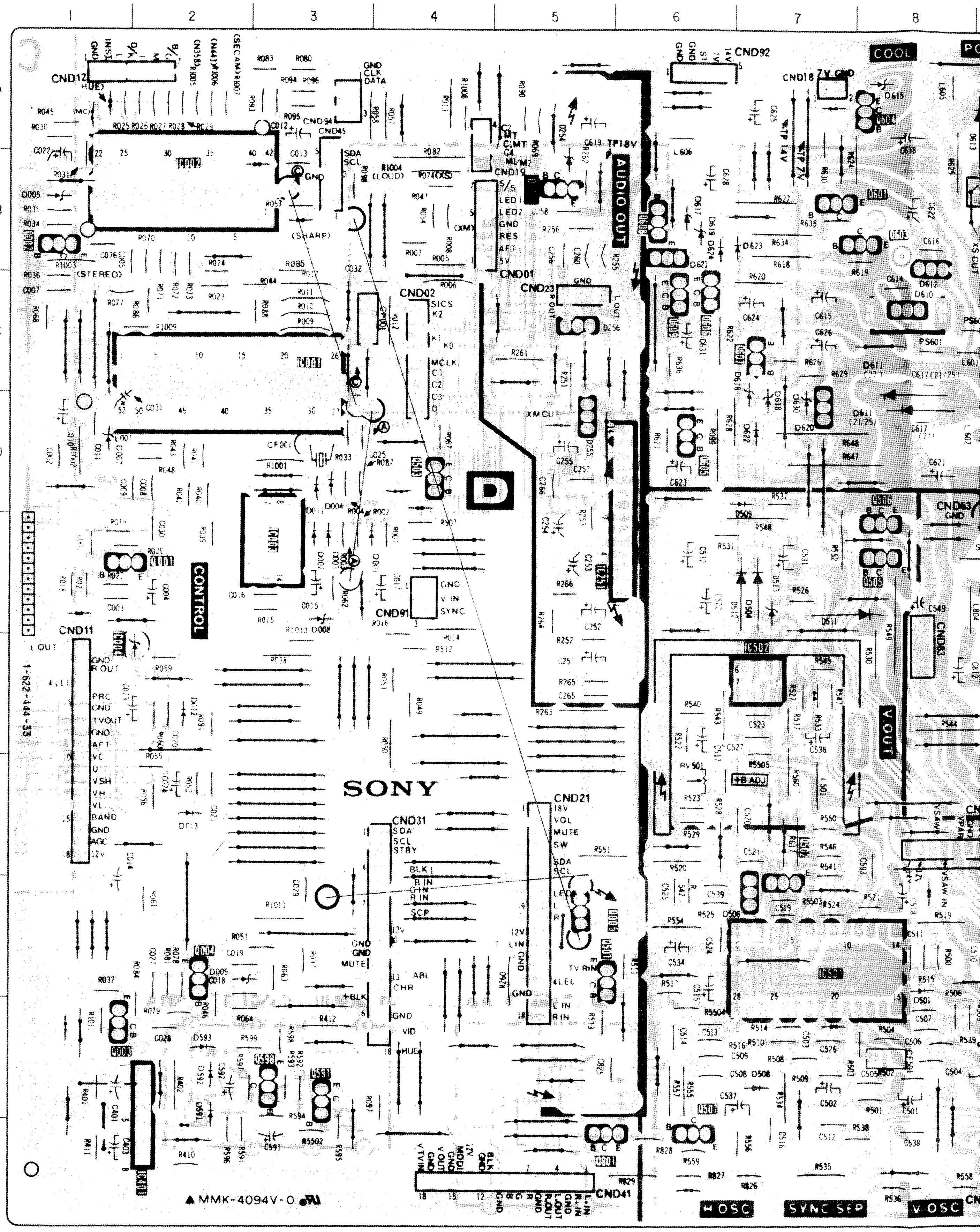


SONY
CNK21
CNK25
IC201
Q201
Q202
L CAD
KS
1-629-781-21

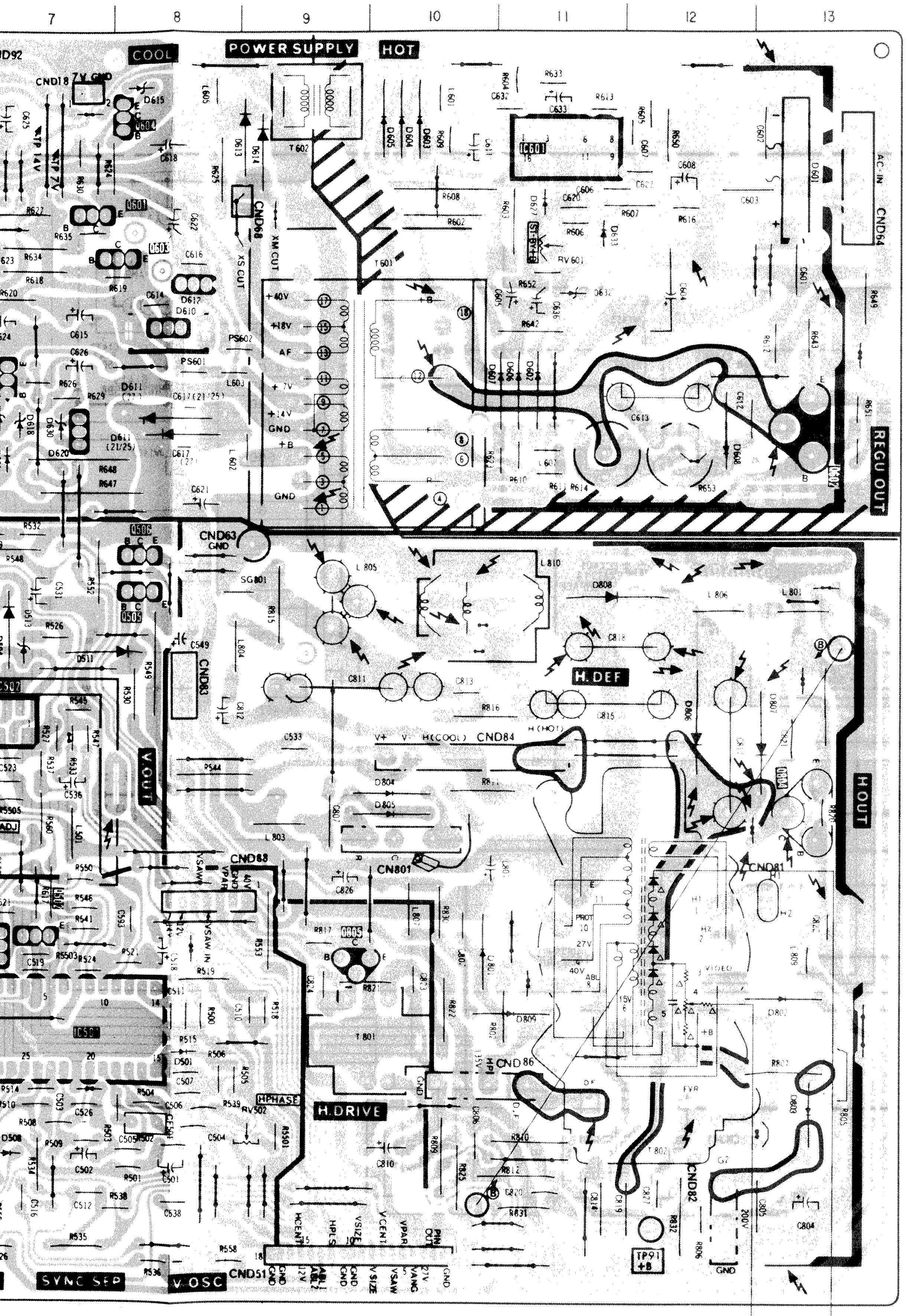
• D BOARD WAVEFORM



– D Board –



1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
CND12
CND92
CND18
COOL
AUDIO OUT
CONTROL
IC002
IC001
SONY
D
CND11
CND21
CND31
CND41
CND63
V OUT
H OSC
SYNC SEP
V OSC
1-622-444-33
MMK-4094V-0


7
8
9
10
11
12
13
COOL
POWER SUPPLY
HOT
CND18
CND68
CND64
AC-IN
IC601
RV601
T601
T602
PS601
PS602
+40V
+18V
AF
+7V
+14V
GND
+B
REGU OUT
CND63
SG801
L805
L810
L806
L801
D808
H.DEF
H OUT
V OUT
CND83
CND84
CN801
CND81
CND82
CND86
T801
T802
H.DRIVE
HPHASE
RV502
IC501
SYNC SEP
V.OSC
CND51
TP91
+B
GND
FV
HV

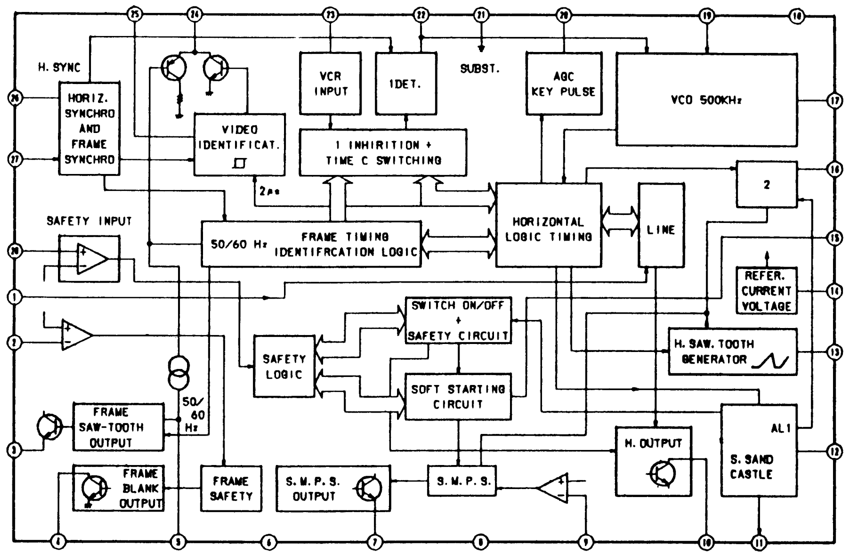
IC	
IC001	D-3
IC002	B-2
IC003	E-3
IC004	F-2
IC251	E-6
IC401	J-2
IC501	H-7
IC502	F-7
IC601	B-11

TRANSISTOR	
Q001	E-2
Q002	B-1
Q003	I-2
Q004	H-2
Q252	B-6
Q501	H-6
Q502	H-7
Q503	D-4
Q505	E-8
Q506	E-8
Q507	J-6
Q591	I-3
Q598	I-3
Q601	B-8
Q602	D-13
Q603	B-8
Q604	A-8
Q605	D-6
Q606	C-6
Q607	C-7
Q608	B-6
Q609	C-6
Q801	J-6
Q804	G-13
Q805	H-10

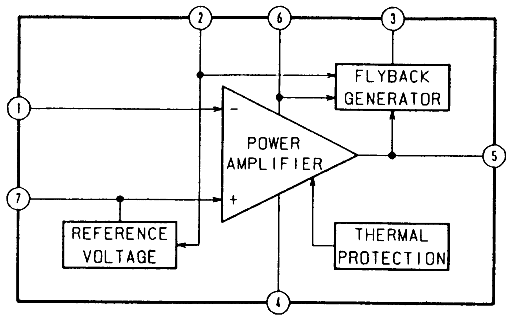
DIODE	
D001	E-4
D002	E-3
D003	E-3
D004	D-3
D005	B-1
D007	D-1
D008	F-3
D009	I-3
D011	E-3
D012	F-2
D013	G-2
D254	B-5
D501	I-8
D504	E-7
D506	H-7
D508	I-7
D511	F-8
D512	E-7
D513	E-7
D591	J-2
D592	I-2
D593	I-2
D601	B-13
D602	C-11
D603	A-10
D604	A-10
D605	A-10
D606	C-11
D607	C-11
D608	D-11
D610	C-8
D611	D-8
D612	C-8
D613	A-9
D614	B-9
D615	A-8
D616	D-7
D617	B-6
D618	D-7
D619	B-6
D620	D-8
D621	C-6
D622	D-7
D623	C-7
D624	C-7
D627	B-11
D630	D-7
D632	C-11
D633	C-11
D801	H-11
D802	H-13
D803	I-13
D804	G-10
D805	G-10
D806	F-12
D808	E-12
D809	H-11

VARIABLE RESISTOR	
RV501	G-6
RV502	I-9
RV601	B-11

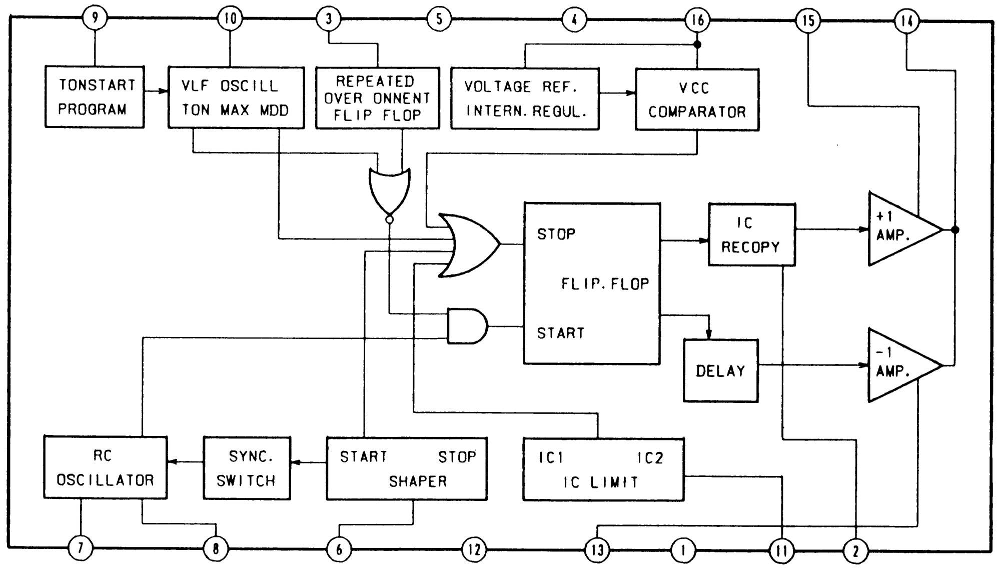
D BOARD IC501 TEA2028A


H. SYNC
HORIZ. SYNCHRO AND FRAME SYNCHRO
VIDEO IDENTIFICAT.
VCR INPUT
IDET.
SUBST.
AGC KEY PULSE
VCO 500KHz
I INHIBITION + TIME C SWITCHING
SAFETY INPUT
50/60 Hz
FRAME TIMING IDENTIFICATION LOGIC
HORIZONTAL LOGIC TIMING
LINE
2
REFER. CURRENT VOLTAGE
SWITCH ON/OFF + SAFETY CIRCUIT
SAFETY LOGIC
SOFT STARTING CIRCUIT
H. SAW. TOOTH GENERATOR
FRAME SAW-TOOTH OUTPUT
50/60 Hz
AL1
H. OUTPUT
S. SAND CASTLE
FRAME BLANK OUTPUT
FRAME SAFETY
S.M.P.S. OUTPUT
S.M.P.S.

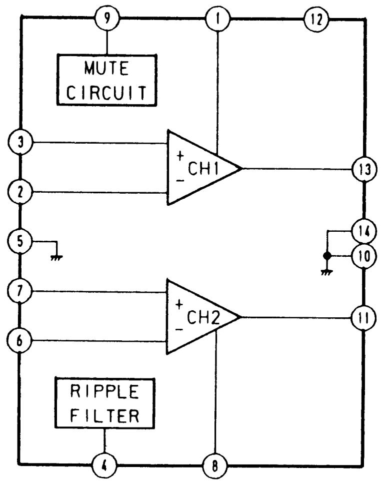
D BOARD IC502 TDA8170

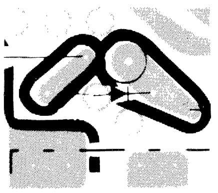

②
⑥
③
①
⑦
⑤
④
FLYBACK GENERATOR
POWER AMPLIFIER
REFERENCE VOLTAGE
THERMAL PROTECTION

D BOARD IC601 TEA2164

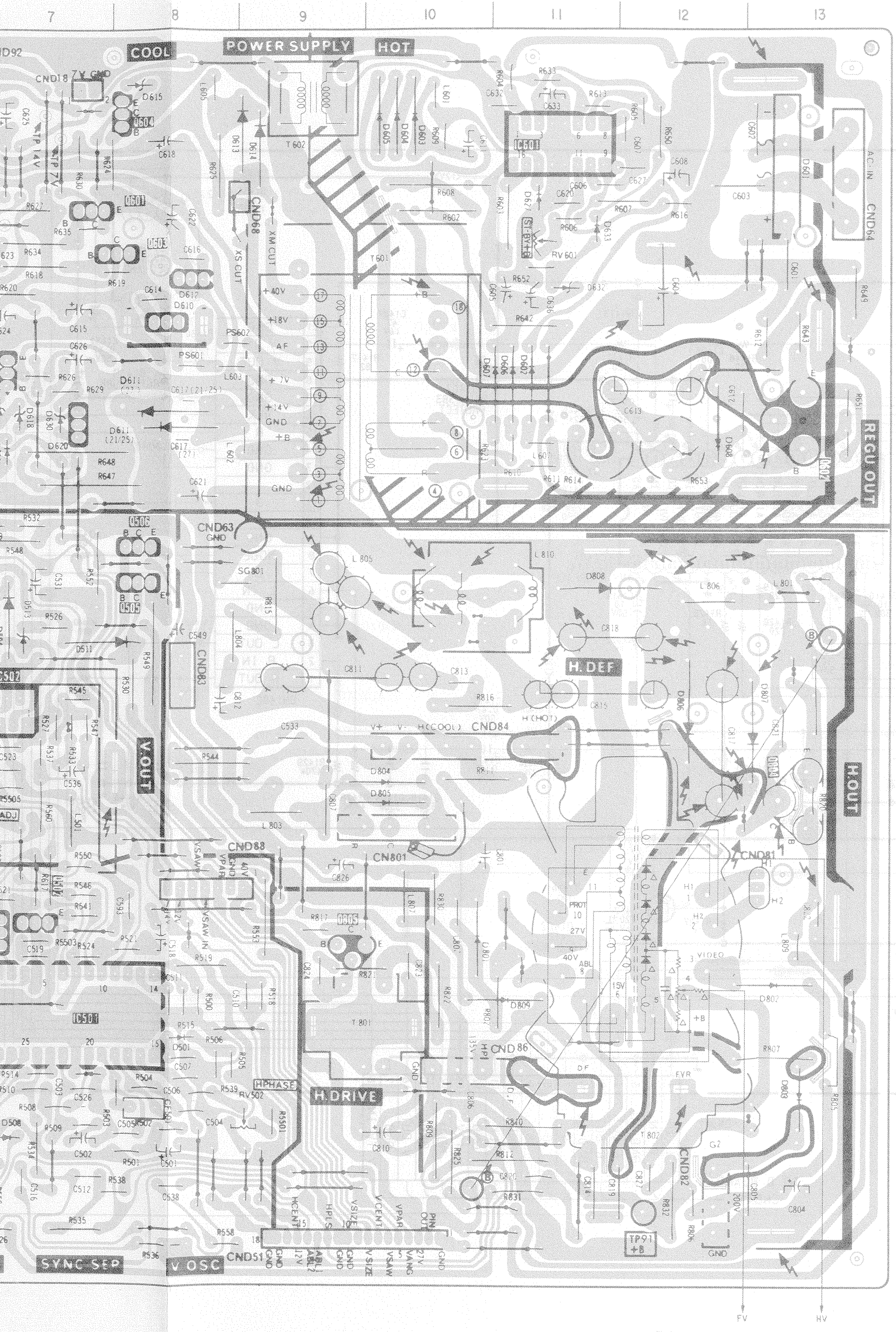

⑨
⑩
③
⑤
④
⑯
⑮
⑭
TONSTART PROGRAM
VLF OSCILL TON MAX MDD
REPEATED OVER ONNENT FLIP FLOP
VOLTAGE REF. INTERN. REGUL.
VCC COMPARATOR
STOP
FLIP. FLOP
START
IC RECOPY
DELAY
+1 AMP.
-1 AMP.
RC OSCILLATOR
SYNC. SWITCH
START STOP SHAPER
IC1 IC2 IC LIMIT
⑦
⑧
⑥
⑫
⑬
①
⑪
②

D BOARD IC251 LA4280


⑨
①
⑫
MUTE CIRCUIT
③
②
⑤
⑦
⑥
CH1
CH2
⑬
⑭
⑩
⑪
RIPPLE FILTER
④
⑧



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.


7
8
9
10
11
12
13
COOL
POWER SUPPLY
HOT
AC IN
CND64
CND68
REGU OUT
CND63
CND83
CND84
CN801
CND81
CND82
CND86
CND51
H.DEF
V.OUT
H.OUT
H.DRIVE
H.PHASE
SYNC SEP
V OSC
IC501
TP91 +B
GND
FV
HV

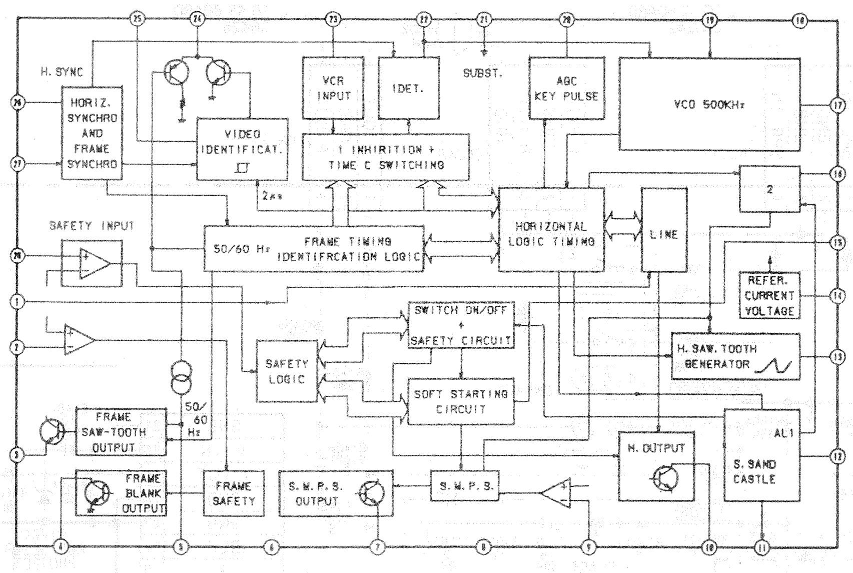
IC	
IC001	D-3
IC002	B-2
IC003	E-3
IC004	F-2
IC251	E-6
IC401	J-2
IC501	H-7
IC502	F-7
IC601	B-11

TRANSISTOR	
Q001	E-2
Q002	B-1
Q003	I-2
Q004	H-2
Q252	B-6
Q501	H-6
Q502	H-7
Q503	D-4
Q505	E-8
Q506	E-8
Q507	J-6
Q591	I-3
Q598	I-3
Q601	B-8
Q602	D-13
Q603	B-8
Q604	A-8
Q605	D-6
Q606	C-6
Q607	C-7
Q608	B-6
Q609	C-6
Q801	J-6
Q804	G-13
Q805	H-10

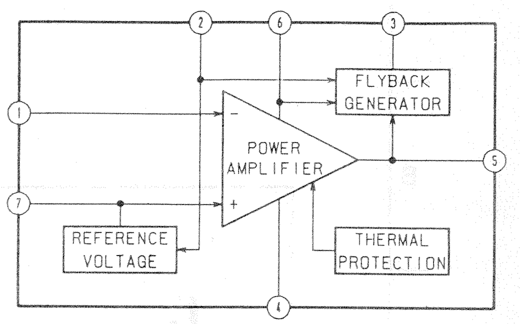
DIODE	
D001	E-4
D002	E-3
D003	E-3
D004	D-3
D005	B-1
D007	D-1
D008	F-3
D009	I-3
D011	E-3
D012	F-2
D013	G-2
D254	B-5
D501	I-8
D504	E-7
D506	H-7
D508	I-7
D511	F-8
D512	E-7
D513	E-7
D591	J-2
D592	I-2
D593	I-2
D601	B-13
D602	C-11
D603	A-10
D604	A-10
D605	A-10
D606	C-11
D607	C-11
D608	D-11
D610	C-8
D611	D-8
D612	C-8
D613	A-9
D614	B-9
D615	A-8
D616	D-7
D617	B-6
D618	D-7
D619	B-6
D620	D-8
D621	C-6
D622	D-7
D623	C-7
D624	C-7
D627	B-11
D630	D-7
D632	C-11
D633	C-11
D801	H-11
D802	H-13
D803	I-13
D804	G-10
D805	G-10
D806	F-12
D808	E-12
D809	H-11

VARIABLE RESISTOR	
RV501	G-6
RV502	I-9
RV601	B-11

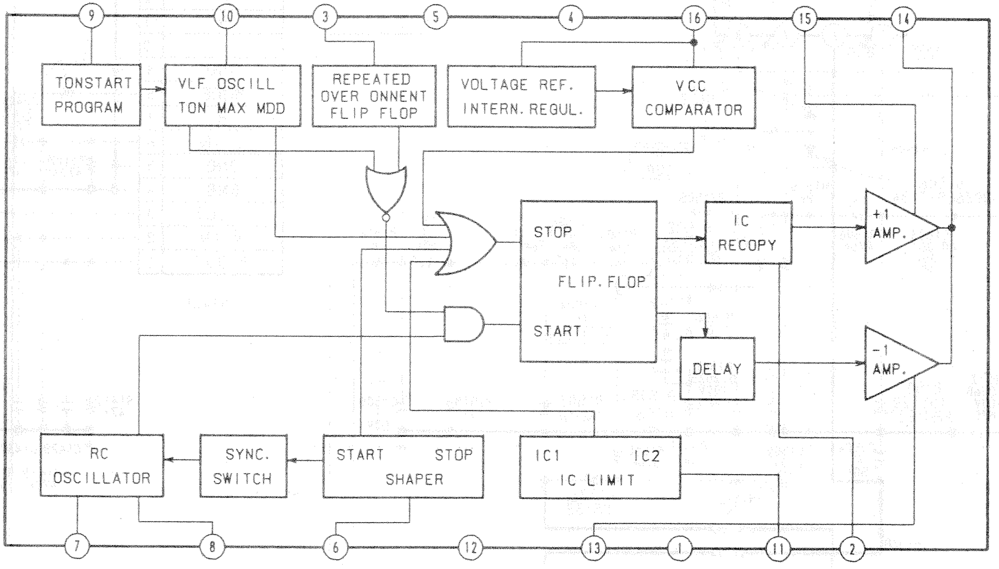
D BOARD IC501 TEA2028A


H. SYNC
HORIZ. SYNCHRO AND FRAME SYNCHRO
VIDEO IDENTIFICAT.
VCR INPUT
IDET.
SUBST.
AGC KEY PULSE
VCO 500KHz
1 INHIRITION + TIME C SWITCHING
2μs
SAFETY INPUT
50/60 Hz
FRAME TIMING IDENTIFRCATION LOGIC
HORIZONTAL LOGIC TIMING
LINE
2
REFER. CURRENT VOLTAGE
SWITCH ON/OFF + SAFETY CIRCUIT
SAFETY LOGIC
SOFT STARTING CIRCUIT
H. SAW. TOOTH GENERATOR
50/60 Hz
FRAME SAW-TOOTH OUTPUT
FRAME BLANK OUTPUT
FRAME SAFETY
S. M. P. S. OUTPUT
S. M. P. S.
H. OUTPUT
AL1
S. SAND CASTLE
25
24
23
22
21
20
19
18
26
27
28
1
2
3
17
16
15
14
13
12
4
5
6
7
8
9
10
11

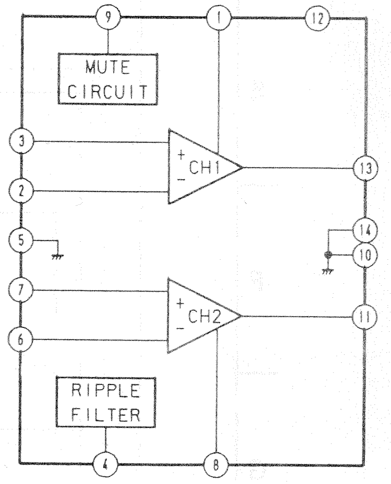
D BOARD IC502 TDA8170

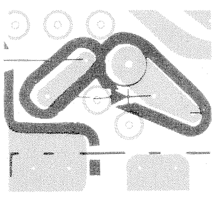

2
6
3
1
7
5
4
FLYBACK GENERATOR
POWER AMPLIFIER
REFERENCE VOLTAGE
THERMAL PROTECTION

D BOARD IC601 TEA2164

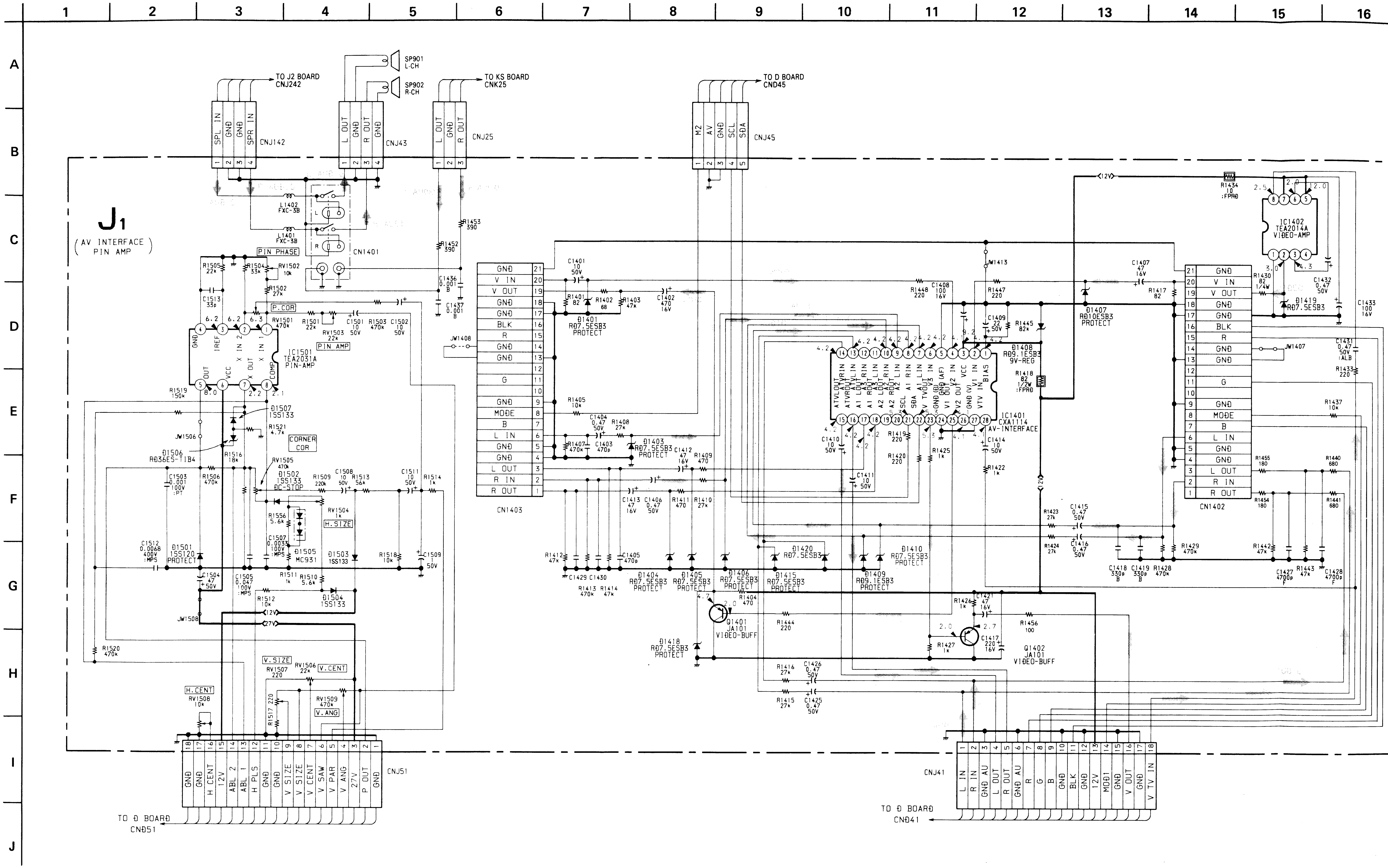

9
10
3
5
4
16
15
14
TONSTART PROGRAM
VLF OSCILL TON MAX MDD
REPEATED OVER ONNENT FLIP FLOP
VOLTAGE REF. INTERN. REGUL.
VCC COMPARATOR
STOP
FLIP. FLOP
START
IC RECOPY
+1 AMP.
-1 AMP.
DELAY
RC OSCILLATOR
SYNC. SWITCH
START STOP SHAPER
IC1 IC2 IC LIMIT
7
8
6
12
13
1
11
2

D BOARD IC251 LA4280

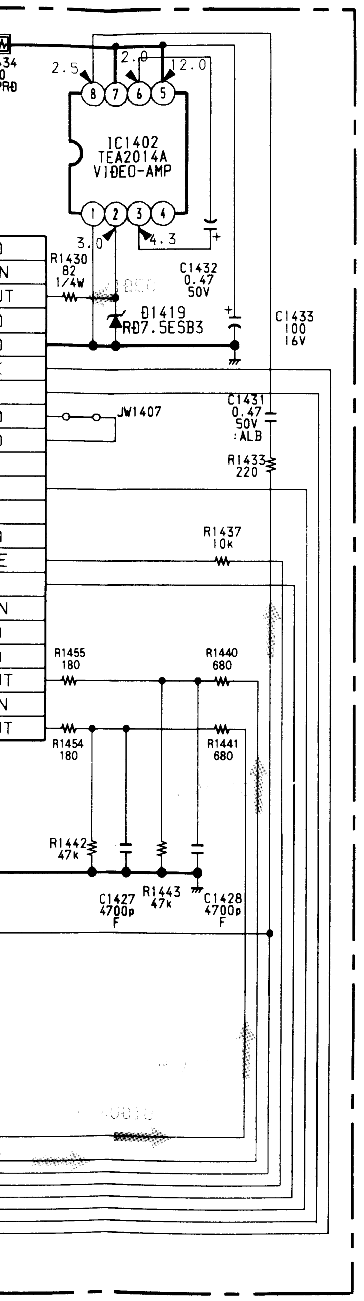

9
1
12
MUTE CIRCUIT
3
2
5
7
6
CH1
CH2
13
14
10
11
RIPPLE FILTER
4
8

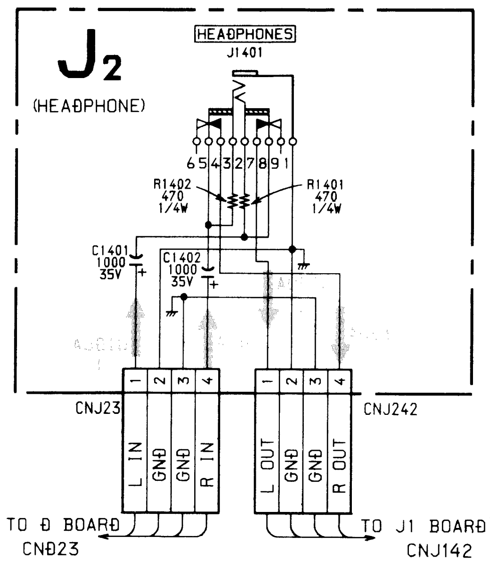


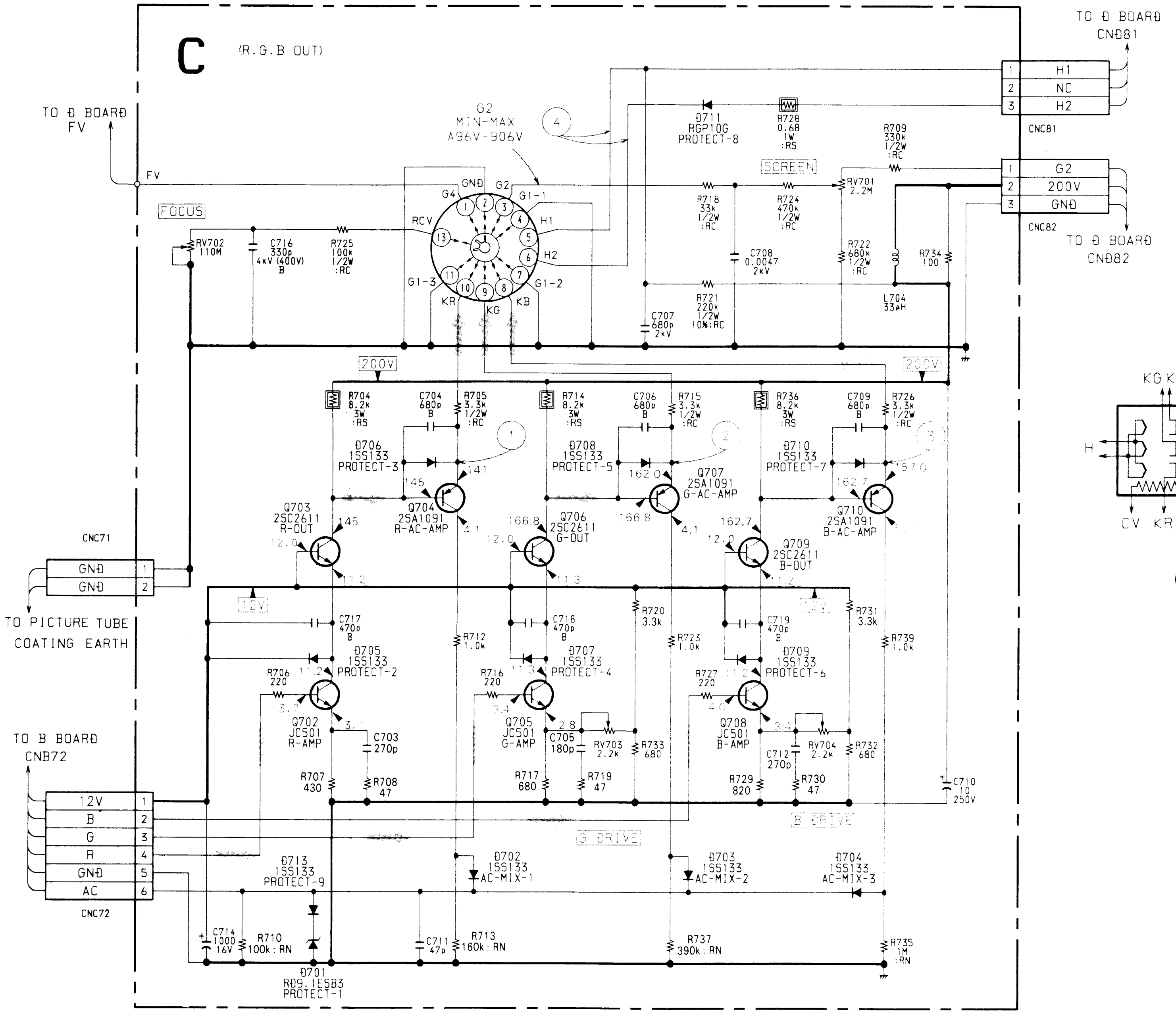
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

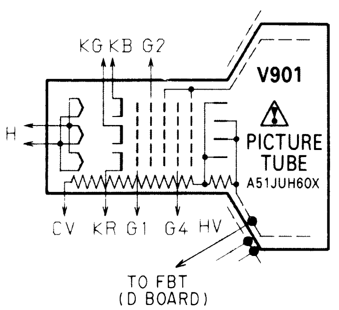

J1
(AV INTERFACE PIN AMP)
TO J2 BOARD CNJ242
SP901 L-CH
SP902 R-CH
TO KS BOARD CNK25
TO D BOARD CND45
CNJ142
SPL IN
GND
GND
SPR IN
CNJ43
L OUT
GND
R OUT
GND
CNJ25
L OUT
GND
R OUT
CNJ45
M2
AV
GND
SCL
SDA
L1402 FXC-3B
L1401 FXC-3B
CN1401
R1453 390
R1452 390
PIN PHASE
R1505 22k
R1504 33k
RV1502 10k
R1502 27k
C1513 33p
P.COR
RV1501 470k
R1501 22k
RV1503 22k
C1501 10 50V
R1503 470k
C1502 10 50V
PIN AMP
IC1501 TEA2031A PIN-AMP
GND
IREF
X IN 2
X IN 1
OUT
VCC
X OUT
COMP
R1519 150k
D1507 1SS133
R1521 4.7k
CORNER COR
JW1506
D1506 RD36ES-T1B4
R1516 18k
RV1505 470k
D1502 1SS133 DC-STOP
R1509 220k
C1508 10 50V
R1513 56k
C1511 10 50V
R1514 1k
C1503 0.001 100V :PT
R1506 470k
R1556 5.6k
RV1504 1k
H.SIZE
C1507 0.0033 100V :MPS
D1505 MC931
D1503 1SS133
R1518 10k
C1509 1 50V
C1512 0.0068 400V :MPS
D1501 1SS120 PROTECT
C1504 47 50V
C1505 0.047 100V :MPS
R1511 1k
R1510 5.6k
D1504 1SS133
R1512 10k
12V
27V
JW1508
R1520 470k
V.SIZE
RV1507 220
RV1506 22k
V.CENT
H.CENT
RV1508 10k
R1517 220
RV1509 470k
V.ANG
CNJ51
GND
GND
H CENT
12V
ABL 2
ABL 1
H PLS
GND
GND
V SIZE
V SIZE
V CENT
V SAW
V PAR
V ANG
27V
P OUT
GND
TO D BOARD CND51
C1436 0.001 B
C1437 0.001 B
JW1408
CN1403
GND
V IN
V OUT
GND
GND
BLK
R
GND
GND
G
GND
MODE
B
L IN
GND
GND
L OUT
R IN
R OUT
C1401 10 50V
R1401 82
R1402 68
R1403 47k
C1402 470 16V
D1401 RD7.5ESB3 PROTECT
R1405 10k
C1404 0.47 50V
R1408 27k
R1407 470k
C1403 470p
D1403 RD7.5ESB3 PROTECT
C1412 47 16V
R1409 470
C1413 47 16V
C1406 0.47 50V
R1411 470
R1410 27k
R1412 47k
C1405 470p
C1429
C1430
R1413 470k
R1414 47k
D1404 RD7.5ESB3 PROTECT
D1405 RD7.5ESB3 PROTECT
D1406 RD7.5ESB3 PROTECT
D1415 RD7.5ESB3 PROTECT
D1420 RD7.5ESB3
D1409 RD9.1ESB3 PROTECT
D1410 RD7.5ESB3 PROTECT
R1404 470
Q1401 JA101 VIDEO-BUFF
D1418 RD7.5ESB3 PROTECT
R1444 220
R1416 27k
C1426 0.47 50V
R1415 27k
C1425 0.47 50V
R1448 220
C1408 100 16V
JW1413
R1447 220
C1409 22 50V
R1445 82k
D1408 RD9.1ESB3 9V-REG
R1418 82 1/2W :FPRD
IC1401 CXA1114 AV-INTERFACE
ATVLOUT
ATVRIN
ATVROUT
A1 LIN
A1 LOUT
A1 RIN
A1 ROUT
A2 LIN
A2 LOUT
A2 RIN
A2 ROUT
SCL
SDA
A1 RIN
V TVOUT
V3 IN
GND (AF)
GND (D)
V1 OUT
V2 IN
V2 OUT
VCC
GND (V)
V1 IN
VTV IN
BIAS
C1410 10 50V
C1411 10 50V
R1419 220
R1420 220
R1425 1k
C1414 10 50V
R1422 1k
R1423 27k
C1415 0.47 50V
R1424 27k
C1416 0.47 50V
R1426 1k
C1421 47 16V
R1427 1k
C1417 220 16V
Q1402 JA101 VIDEO-BUFF
R1456 100
12V
R1434 10 :FPRD
IC1402 TEA2014A VIDEO-AMP
C1407 47 16V
R1417 82
D1407 RD10ESB3 PROTECT
R1430 82 1/4W
C1432 0.47 50V
D1419 RD7.5ESB3
C1433 100 16V
C1431 0.47 50V :ALB
JW1407
R1433 220
R1437 10k
CN1402
GND
V IN
V OUT
GND
GND
BLK
R
GND
GND
G
GND
MODE
B
L IN
GND
GND
L OUT
R IN
R OUT
R1455 180
R1440 680
R1454 180
R1441 680
C1418 330p B
C1419 330p B
R1428 470k
R1429 470k
R1442 47k
C1427 4700p F
R1443 47k
C1428 4700p F
CNJ41
L IN
R IN
GND AU
L OUT
R OUT
GND AU
R
G
B
GND
BLK
GND
12V
MOD1
GND
V OUT
GND
V TV IN
TO D BOARD CND41

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

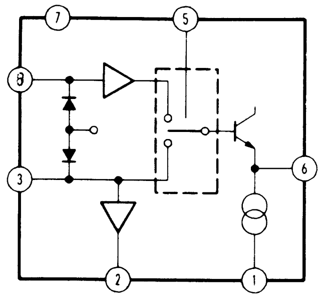

IC1402
TEA2014A
VIDEO-AMP
R1430 82 1/4W
C1432 0.47 50V
D1419 RD7.5ESB3
C1433 100 16V
C1431 0.47 50V :ALB
R1433 220
JW1407
R1437 10k
R1455 180
R1440 680
R1454 180
R1441 680
R1442 47k
C1427 4700p F
R1443 47k
C1428 4700p F


J2
(HEADPHONE)
HEADPHONES
J1401
R1402 470 1/4W
R1401 470 1/4W
C1401 1000 35V
C1402 1000 35V
CNJ23
CNJ242
L IN
GND
GND
R IN
L OUT
GND
GND
R OUT
TO D BOARD CND23
TO J1 BOARD CNJ142

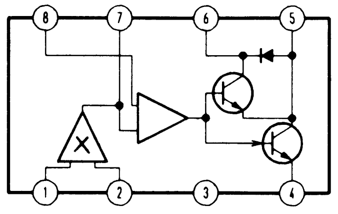

C
(R.G.B OUT)
TO D BOARD FV
FV
FOCUS
RV702 110M
C716 330p 4kV (400V) B
R725 100k 1/2W :RC
G2 MIN-MAX A96V-906V
RCV
G4
GND
G2
G1-1
H1
H2
G1-3
G1-2
KR
KG
KB
D711 RGP10G PROTECT-8
R728 0.68 1W :RS
R709 330k 1/2W :RC
SCREEN
RV701 2.2M
R718 33k 1/2W :RC
R724 470k 1/2W :RC
C708 0.0047 2kV
R722 680k 1/2W :RC
R734 100
L704 33μH
C707 680p 2kV
R721 220k 1/2W 10M:RC
TO D BOARD CND81
H1
NC
H2
CNC81
G2
200V
GND
CNC82
TO D BOARD CND82
200V
R704 8.2k 3W :RS
C704 680p B
R705 3.3k 1/2W :RC
D706 1SS133 PROTECT-3
Q703 2SC2611 R-OUT
Q704 2SA1091 R-AC-AMP
R714 8.2k 3W :RS
C706 680p B
R715 3.3k 1/2W :RC
D708 1SS133 PROTECT-5
Q707 2SA1091 G-AC-AMP
Q706 2SC2611 G-OUT
R736 8.2k 3W :RS
C709 680p B
R726 3.3k 1/2W :RC
D710 1SS133 PROTECT-7
Q710 2SA1091 B-AC-AMP
Q709 2SC2611 B-OUT
CNC71
GND
GND
TO PICTURE TUBE COATING EARTH
12V
C717 470p B
D705 1SS133 PROTECT-2
R706 220
Q702 JC501 R-AMP
C703 270p
R707 430
R708 47
R712 1.0k
C718 470p B
D707 1SS133 PROTECT-4
R716 220
Q705 JC501 G-AMP
C705 180p
RV703 2.2k
R733 680
R717 680
R719 47
R720 3.3k
R723 1.0k
C719 470p B
D709 1SS133 PROTECT-6
R727 220
Q708 JC501 B-AMP
C712 270p
RV704 2.2k
R732 680
R729 820
R730 47
R731 3.3k
R739 1.0k
C710 10 250V
TO B BOARD CNB72
12V
B
G
R
GND
AC
CNC72
D713 1SS133 PROTECT-9
D702 1SS133 AC-MIX-1
D703 1SS133 AC-MIX-2
D704 1SS133 AC-MIX-3
G DRIVE
B DRIVE
C714 1000 16V
R710 100k : RN
C711 47p
R713 160k : RN
R737 390k : RN
R735 1M :RN
D701 RD9.1ESB3 PROTECT-1


KG KB G2
V901
H
PICTURE TUBE
A51JUH60X
CV KR G1 G4 HV
TO FBT (D BOARD)

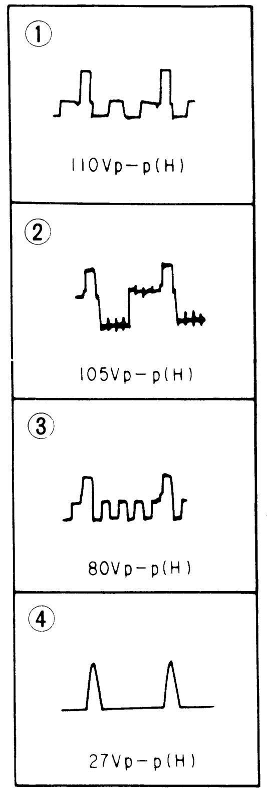
J1 BOARD IC1402 TEA2014A



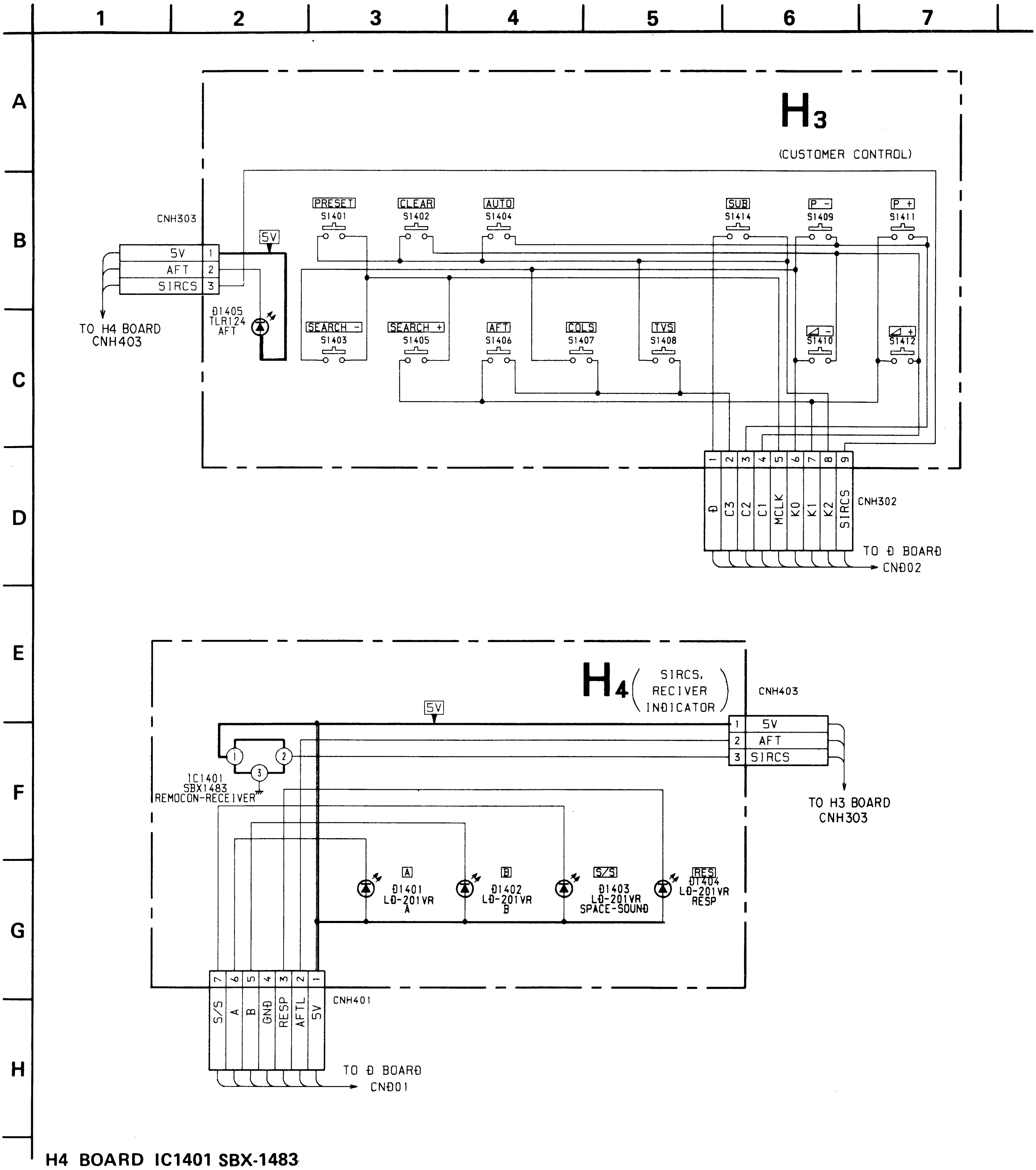
J1 BOARD IC1501 TEA2031A



- **C BOARD WAVEFORM**

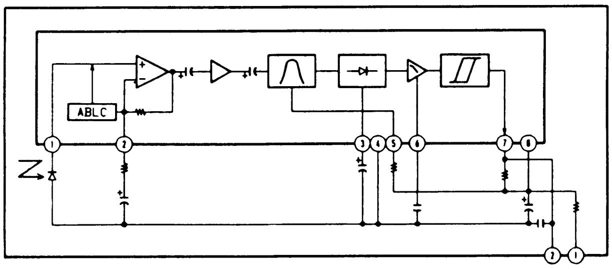


A B C D E F G H I J



1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
H3
(CUSTOMER CONTROL)
CNH303
5V 1
AFT 2
SIRCS 3
TO H4 BOARD
CNH403
5V
D1405
TLR124
AFT
PRESET
S1401
CLEAR
S1402
AUTO
S1404
SUB
S1414
P −
S1409
P +
S1411
SEARCH −
S1403
SEARCH +
S1405
AFT
S1406
COLS
S1407
TVS
S1408
◢ −
S1410
◢ +
S1412
1 2 3 4 5 6 7 8 9
D C3 C2 C1 MCLK K0 K1 K2 SIRCS
CNH302
TO D BOARD
CND02
H4 (SIRCS, RECIVER INDICATOR)
CNH403
5V
1 5V
2 AFT
3 SIRCS
TO H3 BOARD
CNH303
IC1401
SBX1483
REMOCON-RECEIVER
A
D1401
LD-201VR
A
B
D1402
LD-201VR
B
S/S
D1403
LD-201VR
SPACE-SOUND
RES
D1404
LD-201VR
RESP
7 6 5 4 3 2 1
S/S A B GND RESP AFTL 5V
CNH401
TO D BOARD
CND01

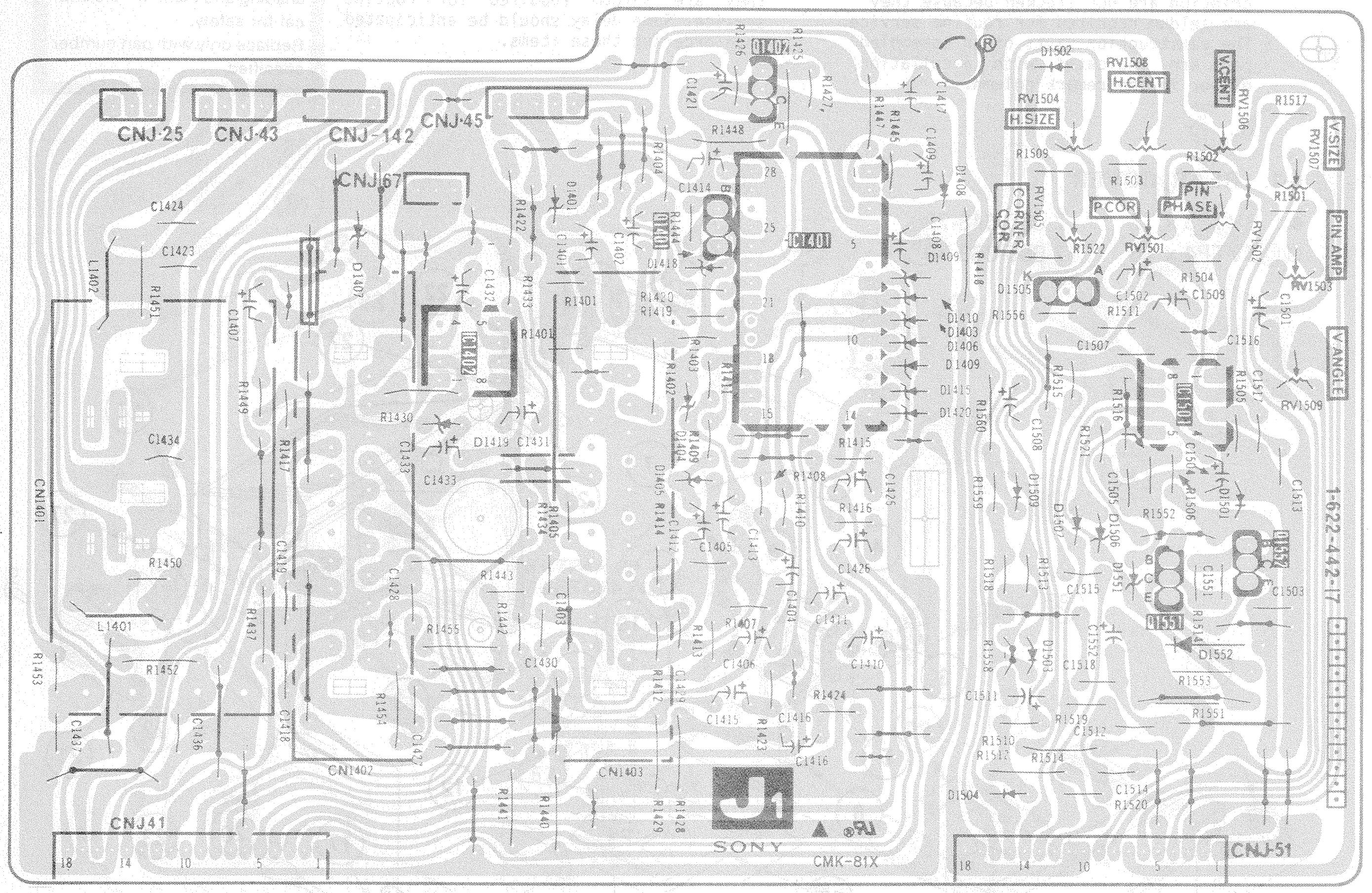
H4 BOARD IC1401 SBX-1483



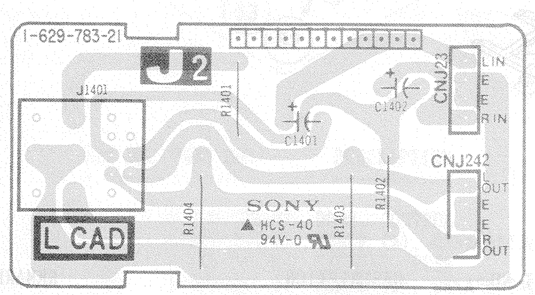
ABLC
1
2
3
4
5
6
7
8
2
1

J1 [INTERFACE] **J2** [HEADPHONE JACK]

– J1 Board –

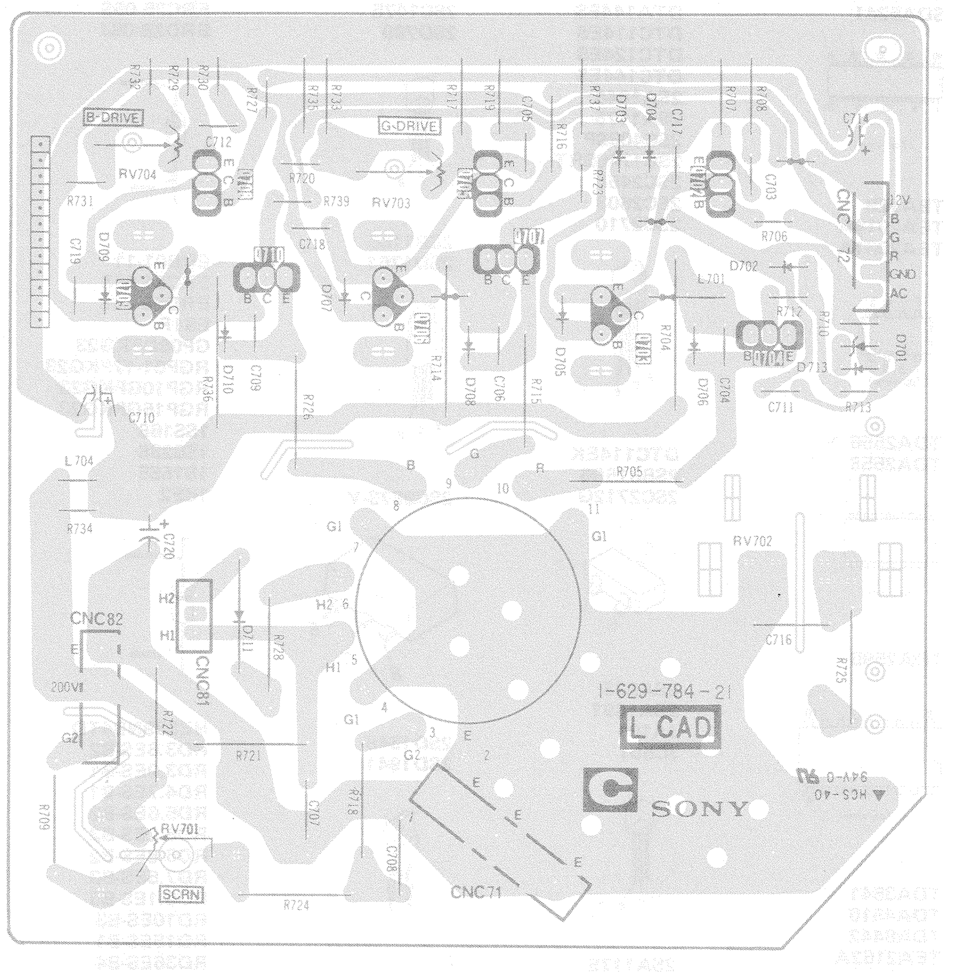

CNJ-25
CNJ-43
CNJ-142
CNJ-45
CNJ67
CNJ401
CNJ41
CN1402
CN1403
CNJ-51
IC1401
IC1402
V.CENT
H.CENT
H.SIZE
CORNER COR
P.COR
PIN PHASE
V.SIZE
PIN AMP
V.ANGLE
1-622-442-17
J1
SONY
CMK-81X

– J2 Board –

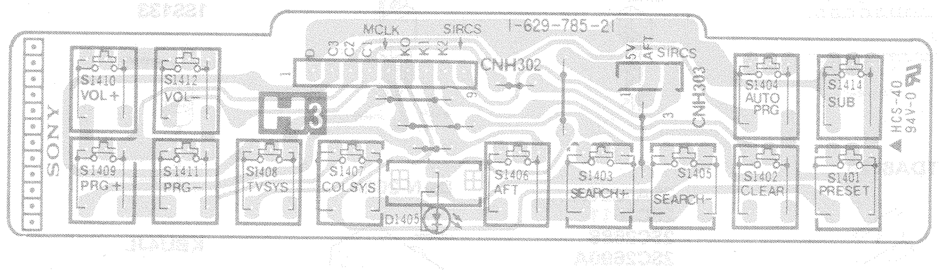

1-629-783-21
J2
J1401
CNJ23
CNJ242
L IN
R IN
L OUT
R OUT
SONY
HCS-40
94V-0
L CAD

C [R·G·B OUT] **H3** [CUSTOMER CONTROL] **H4** [REMOCON RECEIVER]

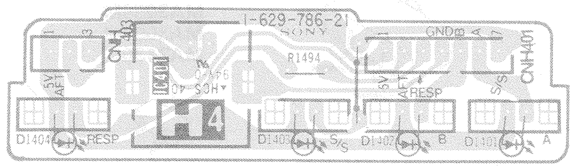
– C Board –


B-DRIVE
G-DRIVE
RV704
RV703
RV702
RV701
CNC72
CNC82
CNC81
CNC71
SCRN
1-629-784-21
L CAD
C
SONY
HCS-40
94V-0

– H3 Board –

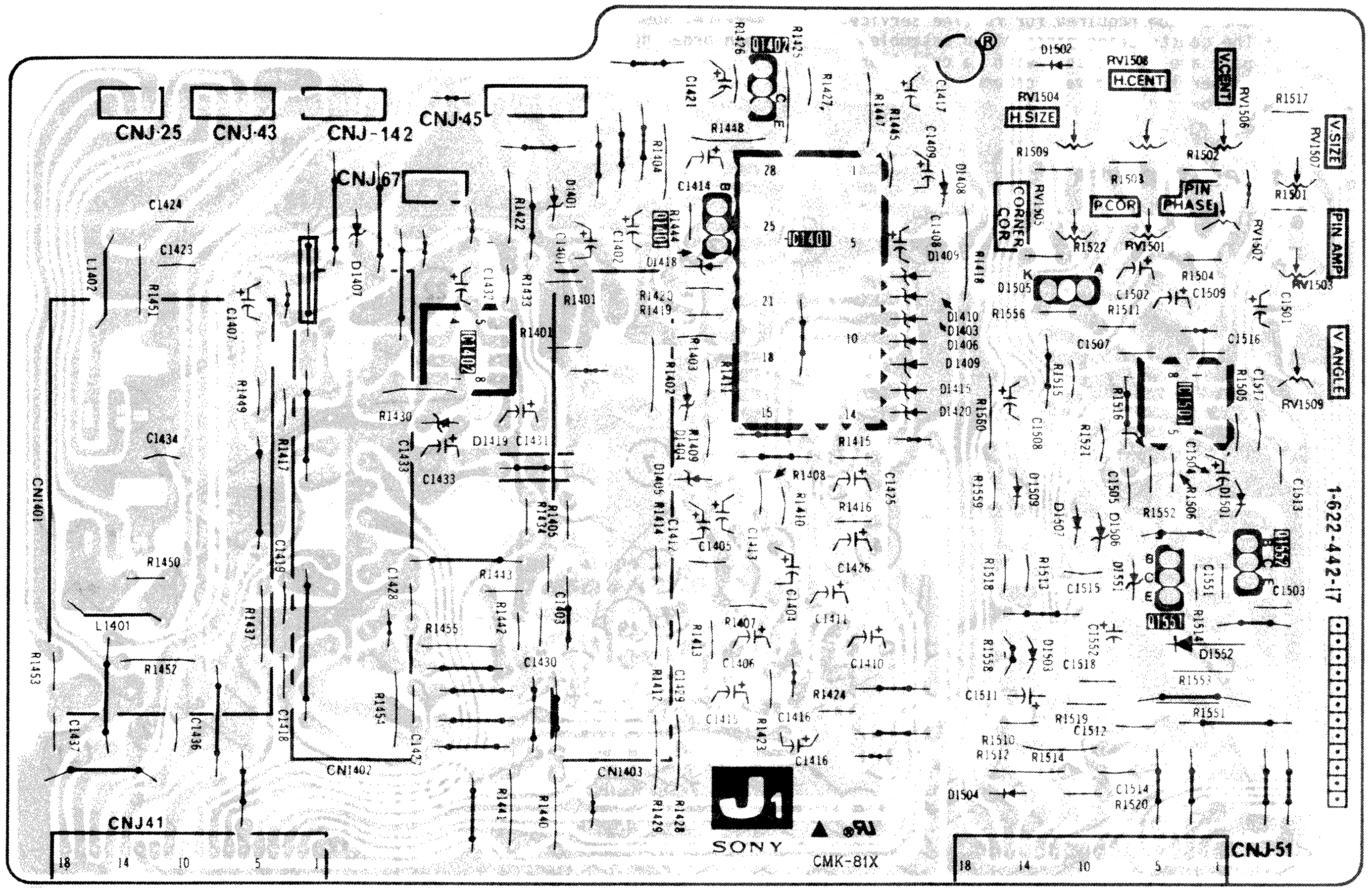

1-629-785-21
CNH302
CNH303
H3
SONY
S1410 VOL+
S1412 VOL–
S1404 AUTO PRG
S1414 SUB
S1409 PRG+
S1411 PRG–
S1408 TVSYS
S1407 COLSYS
S1406 AFT
S1403 SEARCH+
S1405 SEARCH–
S1402 CLEAR
S1401 PRESET
D1405
HCS-40
94V-0

– H4 Board –

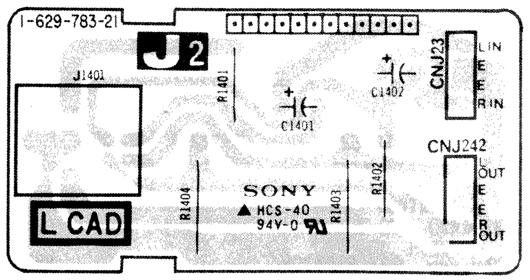

1-629-786-21
SONY
CNH401
CNH403
IC1401
R1494
H4
RESP
D1404
D1403
D1402
D1401

J1 [INTERFACE] **J2** [HEADPHONE JACK]

– J1 Board –

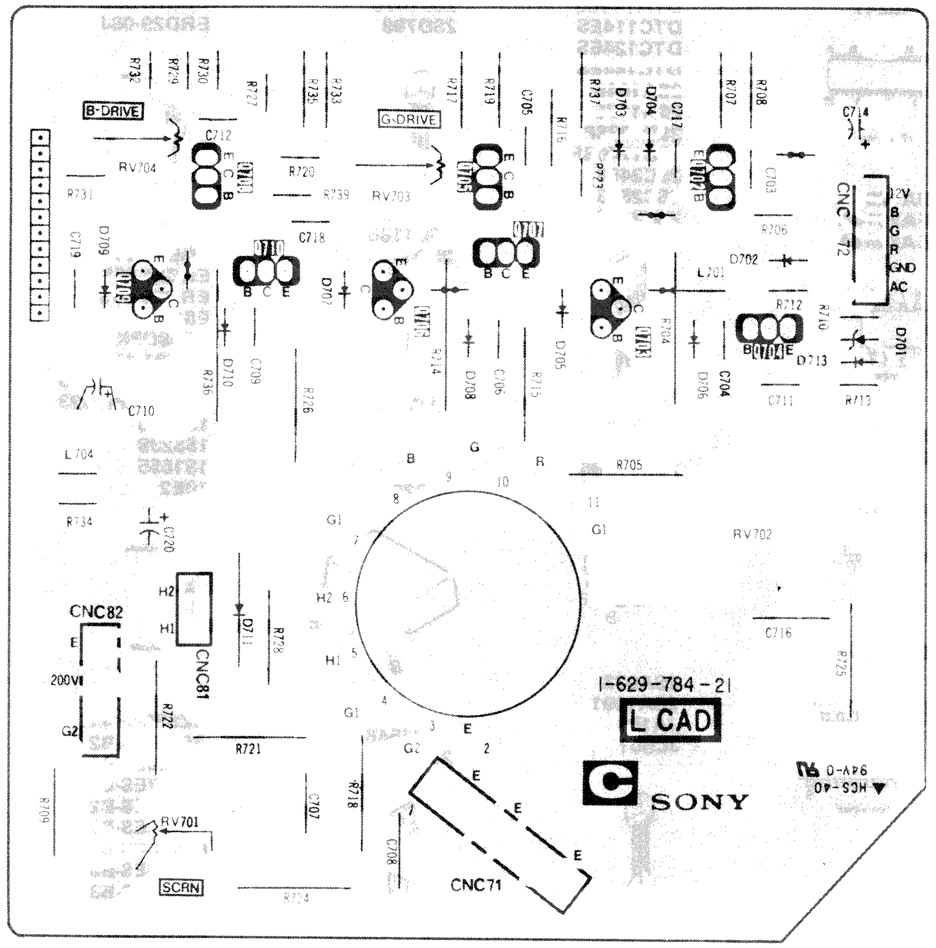

CNJ-25
CNJ-43
CNJ-142
CNJ-45
CNJ-67
CNJ41
CNJ-51
CNJ401
CNJ402
CNJ403
IC1401
IC1402
IC1501
H.SIZE
H.CENT
V.CENT
V.SIZE
PIN AMP
V.ANGLE
CORNER COR
PCOR
PIN PHASE
1-622-442-17
J1
SONY
CMK-81X

– J2 Board –

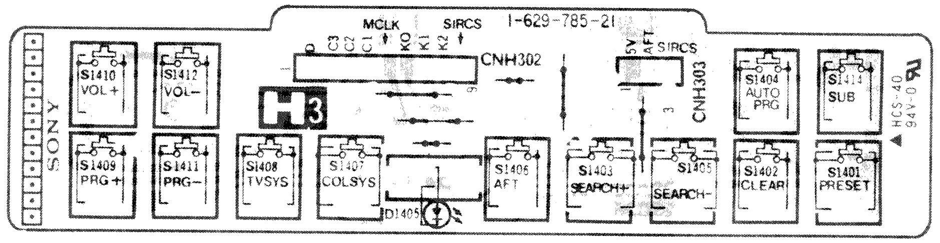

1-629-783-21
J2
J1401
R1401
C1401
C1402
CNJ23
L IN
E
E
R IN
CNJ242
L OUT
E
E
R OUT
R1402
R1403
R1404
SONY
HCS-40
94V-0
L CAD

C [R·G·B OUT] **H3** [CUSTOMER CONTROL] **H4** [REMOCON RECEIVER]

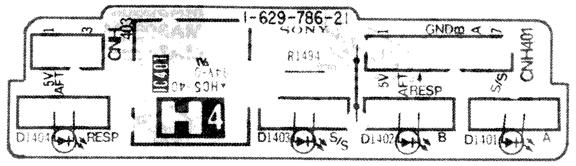
– C Board –


B-DRIVE
G-DRIVE
RV704
RV703
RV702
RV701
SCRN
CNC82
CNC81
CNC71
CNC72
12V
B
G
R
GND
AC
200V
1-629-784-21
L CAD
C
SONY
HCS-40
94V-0

– H3 Board –

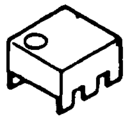

MCLK
SIRCS
1-629-785-21
CNH302
CNH303
H3
SONY
S1410 VOL+
S1412 VOL–
S1409 PRG+
S1411 PRG–
S1408 TVSYS
S1407 COLSYS
S1406 AFT
S1403 SEARCH+
S1405 SEARCH–
S1404 AUTO PRG
S1402 CLEAR
S1413 SUB
S1401 PRESET
D1405
HCS-40
94V-0

– H4 Board –

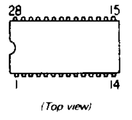

1-629-786-21
SONY
CNH401
CNH403
GND
R1494
AFT
RESP
S/S
H4
D1404
D1403
D1402
D1401
A
B

5-5. SEMICONDUCTORS

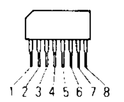
BX1387
SBX1483



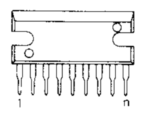
CXA1114P
MAB8461P
SAA5231-V6
TDA4555
TDA4580
TDA6200
TDA6600
TEA2028B
TMM2063D


28
15
1
14
(Top view)

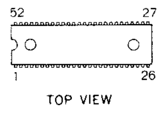
CX20061



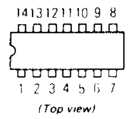
LA4280



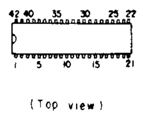
M50436-614SP


52
27
1
26
TOP VIEW

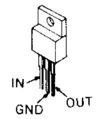
M58655P


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

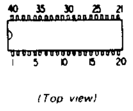
MB88503H


42 40 35 30 25 22
1 5 10 15 21
(Top view)

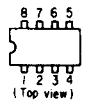
NJM7812B
µPC7812J



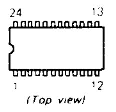
SAA5243E
SDA5241


40 35 30 25 21
1 5 10 15 20
(Top view)

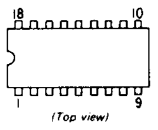
TBA129
TEA2014A
TEA2031A


8 7 6 5
1 2 3 4
(Top view)

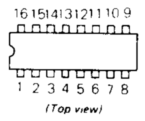
TDA2556
TDA2558


24
13
1
12
(Top view)

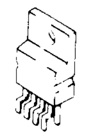
TDA2595


18
10
1
9
(Top view)

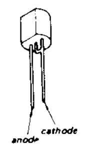
TDA3541
TDA4510
TDA8442
TEA2162A
TEA2164


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

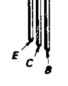
TDA8170



µPC574J


anode
cathode

DTA114ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SA1048
2SA1175
2SC403SP
2SC1740SRT
2SC2458
2SC2603
2SC2710



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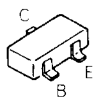
2SB815B6
2SC2712G



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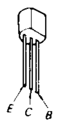
2SA1091
JA101
JC501



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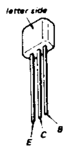
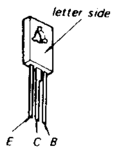
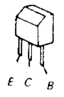
2SC2785


letter side
E
C
B

2SA1220A
2SC2611
2SC2688
2SC2690A


letter side
E
C
B

2SB734
2SC2958
2SD773
2SD774



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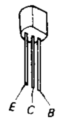
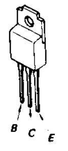
2SC1475
2SD789



2SB1185
2SD1761



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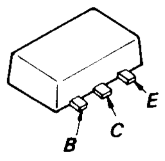

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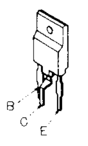
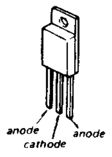
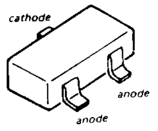
2SD1941



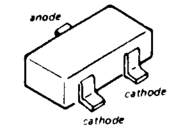
CTU-12S


anode
anode
cathode

DAN-202K


cathode
anode
anode

DAP202K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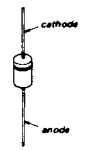
cathode
cathode

ERC06-15S
ERC25-06S
ERD29-08J


cathode
anode

EQB01-11
ERC24-06S
ERD28-06S
ES1F
GP08DPKG23
RGP01-17PKG23
RGP10GPKG23
RGP15GPKG23
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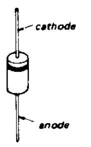
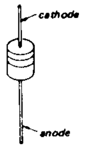
1SS238
1S1555
10E2


cathode
anode

HZS39NB4TD
RD3.6ES-B2
RD3.9ES-B1
RD4.7ES-B1
RD5.6ES-B2
RD6.2ES-B2
RD6.8ES-B2
RD7.5ES-B3
RD9.1ES-B3
RD10ES-B3
RD15ES-B1
RD36ES-B4
RD39ES-B4
1SS119
1SS120
1SS133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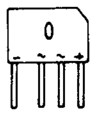
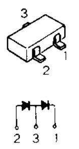
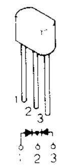


MA3036H
MA3056M
MA3068M
MA3130L



MC921



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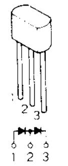
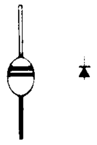
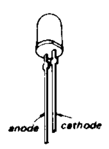


U05G
V19E



SE303AY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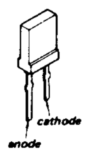
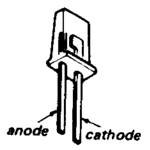
cathode

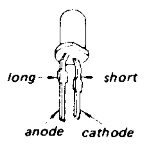
SLP162B


cathode
anode

SR632D


anode
cathode

TLR124
LD201VR


long
short
anode
cathode

SECTION 6

EXPLODED VIEWS

NOTE:

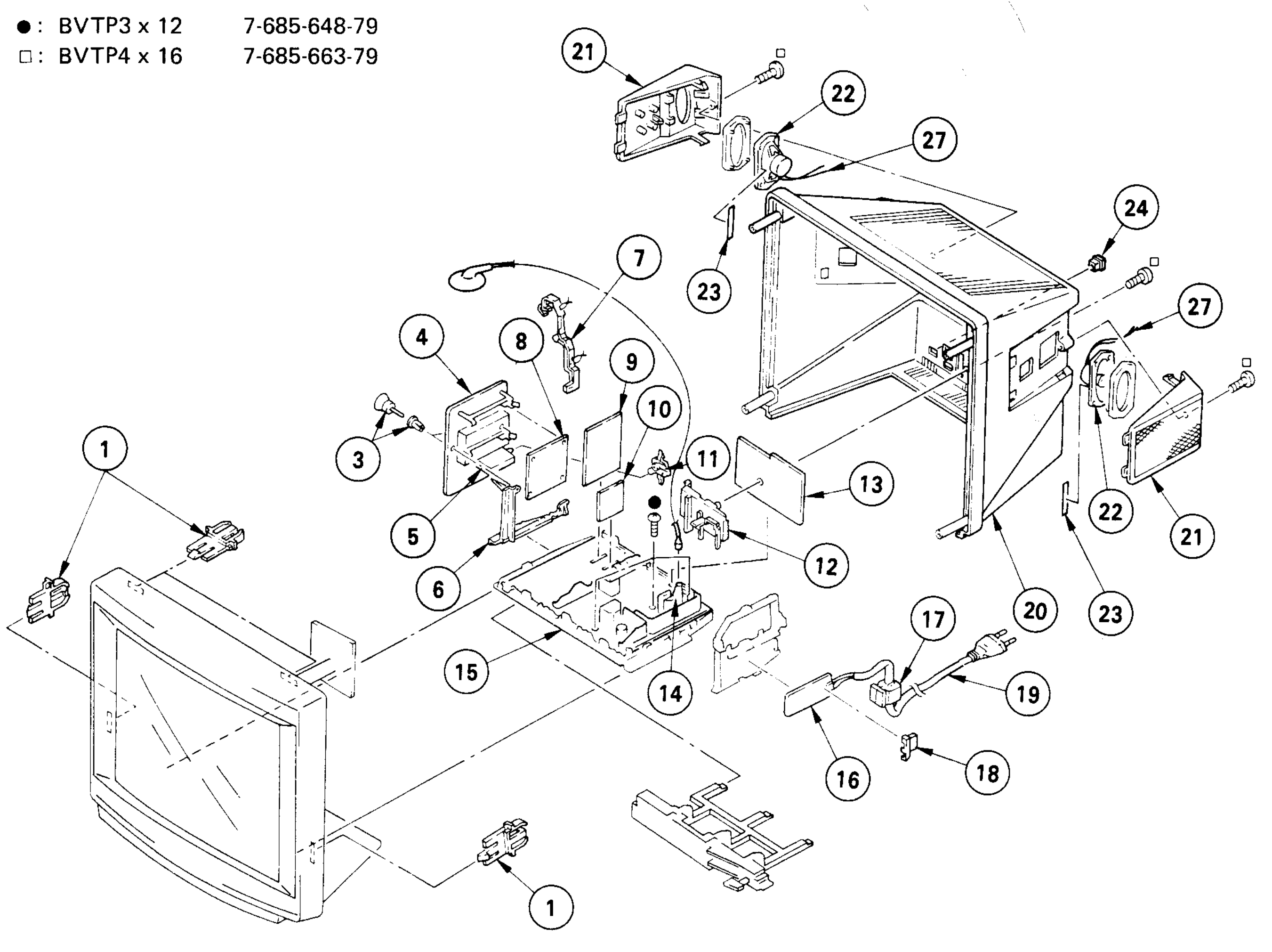
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. REAR COVER

●: BVTP3 x 12 7-685-648-79
□: BVTP4 x 16 7-685-663-79


1
1
1
3
4
5
6
7
8
9
10
11
12
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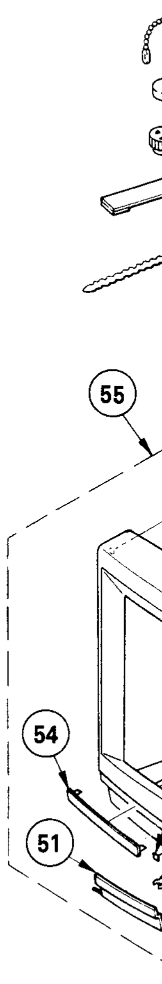
14
15
16
17
18
19
20
21
21
22
22
23
23
24
27
27

REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-382-745-01	HOLDER, RC	
3	4-386-618-01	RIVET, T TYPE	
4	*A-1296-476-A	A BOARD, COMPLETE	
5 ⚠	.1-465-053-11	TUNER, ET (UV-615S)	
6	*4-386-629-12	BRACKET, A	
7	*4-386-628-11	SUPPORTER, PC BOARD	
8	*A-1347-030-A	V BOARD, COMPLETE	
9	*A-1135-498-A	B BOARD, COMPLETE	
10	*1-629-781-21	KS BOARD	
11	*4-386-617-01	HOLDER, TERMINAL	
12	*4-386-624-11	BRACKET, J	
13	*A-1371-373-A	J1 BOARD, COMPLETE	
14 ⚠	.1-439-416-11	TRANSFORMER ASSY, FLYBACK	
15	*A-1345-721-A	D BOARD, COMPLETE	
16	*1-629-719-21	F1 BOARD	
17 ⚠	.4-022-115-01	HOLDER, AC CODE	
18	*4-386-620-01	COVER, POWER	
19 ⚠	.1-559-346-12	CORD, POWER (WITH CONNECTOR)	
20	4-387-808-11	COVER, REAR	
21	X-4385-930-3	BOARD ASSY, BAFFLE	
22	1-503-642-41	SPEAKER	
23	4-387-886-01	SPACER, BAFFLE BOARD	
24	4-389-292-01	BUSHING, CORD	
27	1-574-565-11	CORD (WITH PLUG)	

6-2. PIC



REF.NO.	PAR
51	4-38
52	4-38
53	4-38
54	4-38
55	X-43
56	4-38
57	*4-38
58 ⚠	.8-73
59	4-38
60	1-45
61	3-70
62 ⚠	.1-45
63	*4-37
64	*A-13
65	*4-37
66	4-36
67 ⚠	.1-42

The compo
shading and
cal for safe
Replace on
specified.

SECTION 6
EXPLODED VIEWS

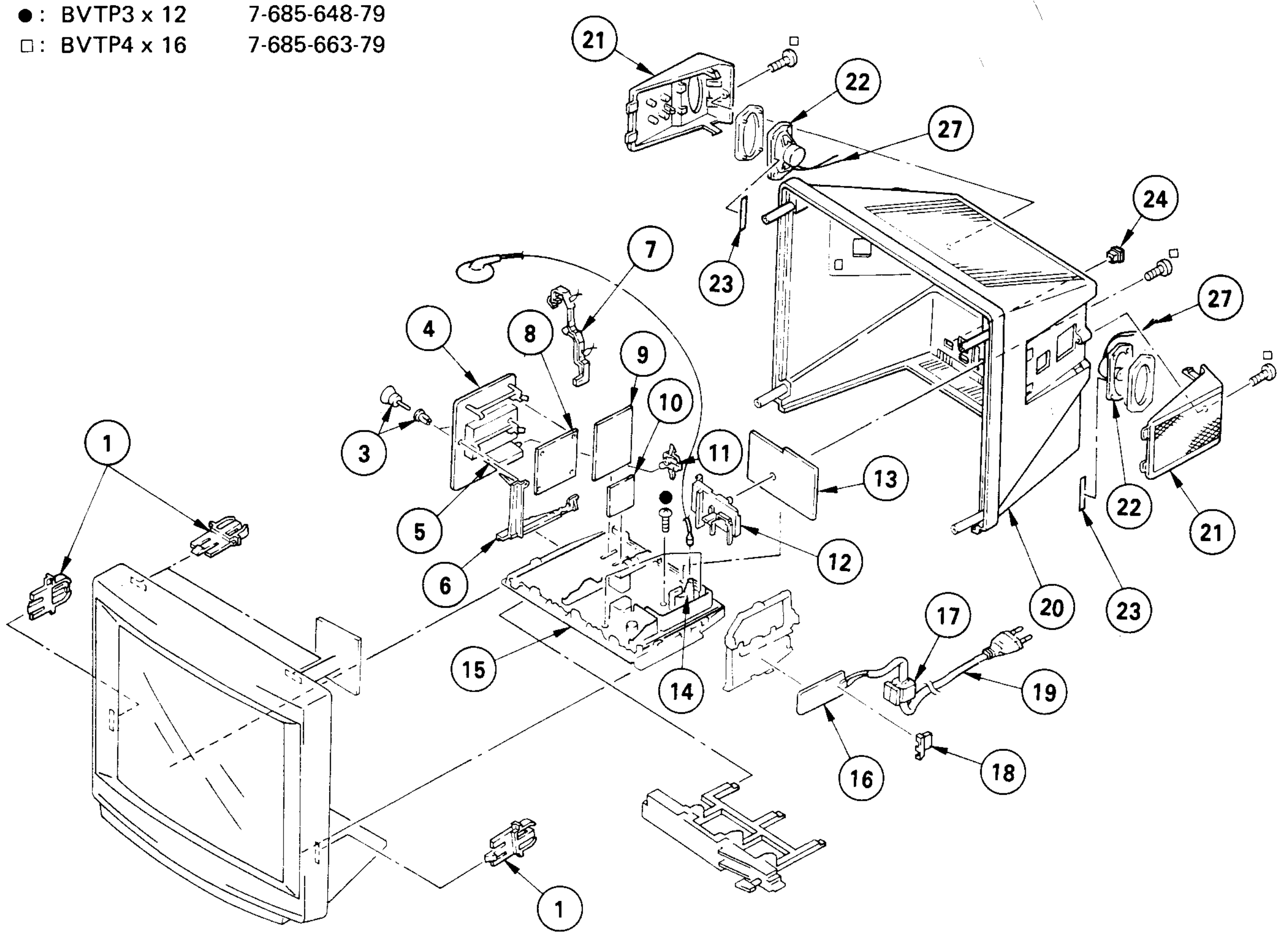
NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

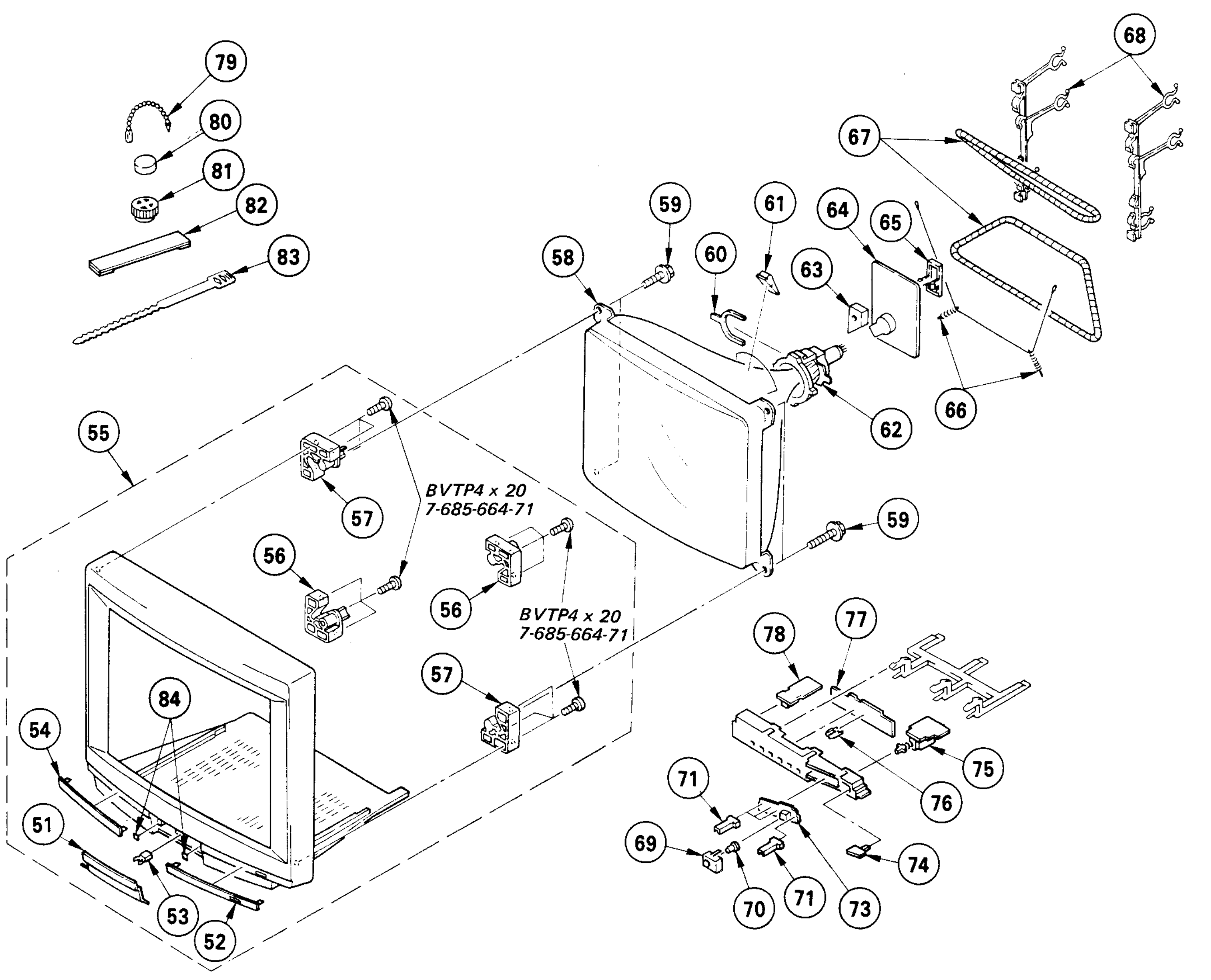
6-1. REAR COVER

●: BVTP3 x 12 7-685-648-79
□: BVTP4 x 16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-382-745-01	HOLDER, RC	
3	4-386-618-01	RIVET, T TYPE	
4	*A-1296-476-A	A BOARD, COMPLETE	
5 ⚠	.1-465-053-11	TUNER, ET (UV-615S)	
6	*4-386-629-12	BRACKET, A	
7	*4-386-628-11	SUPPORTER, PC BOARD	
8	*A-1347-030-A	V BOARD, COMPLETE	
9	*A-1135-498-A	B BOARD, COMPLETE	
10	*1-629-781-21	KS BOARD	
11	*4-386-617-01	HOLDER, TERMINAL	
12	*4-386-624-11	BRACKET, J	
13	*A-1371-373-A	J1 BOARD, COMPLETE	
14 ⚠	.1-439-416-11	TRANSFORMER ASSY, FLYBACK	
15	*A-1345-721-A	D BOARD, COMPLETE	
16	*1-629-719-21	F1 BOARD	
17 ⚠	.4-022-115-01	HOLDER, AC CODE	
18	*4-386-620-01	COVER, POWER	
19 ⚠	.1-559-346-12	CORD, POWER (WITH CONNECTOR)	
20	4-387-808-11	COVER, REAR	
21	X-4385-930-3	BOARD ASSY, BAFFLE	
22	1-503-642-41	SPEAKER	
23	4-387-886-01	SPACER, BAFFLE BOARD	
24	4-389-292-01	BUSHING, CORD	
27	1-574-565-11	CORD (WITH PLUG)	

6-2. PICTURE TUBE



REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-389-279-01	DOOR, CONTROL	
52	4-389-280-01	PLATE (A), ORNAMENTAL	
53	4-386-710-01	CATCHER, PUSH	
54	4-389-281-01	PLATE (B), ORNAMENTAL	
55	X-4389-210-1	BEZNET ASSY	51-54,56,57
56	4-387-805-03	BRACKET (A), PICTURE TUBE	
57	*4-387-806-03	BRACKET (B), PICTURE TUBE	
58 ⚠	.8-738-753-05	PICTURE TUBE (A51JUH60X)	
59	4-382-733-01	SCREW (S), PT	
60	1-452-277-00	MAGNET, BMC	
61	3-703-961-01	SPACER, DY	
62 ⚠	.1-451-295-31	DEFLECTION YOKE (SY-153E)	
63	*4-379-167-01	COVER (MAIN), CV	
64	*A-1330-850-A	C BOARD, COMPLETE	
65	*4-379-160-01	COVER (REAR LID), CV	
66	4-369-318-00	SPRING, TENSION	
67 ⚠	.1-426-383-11	COIL, DEMAGNETIZATION	
68	*4-386-622-01	BAND, DGC	
69	*4-388-955-01	BRACKET (B), LIGHT GUIDE	
70	*4-374-987-01	GUIDE, LIGHT	
71	*4-387-825-01	HOLDER, LED	
73	*1-629-786-21	H4 BOARD	
74	4-389-278-01	BUTTON, POWER	
75	*1-629-720-21	F2 BOARD	
76	*4-384-208-01	HOLDER, LED	
77	*1-629-785-21	H3 BOARD	
78	*1-629-783-21	J2 BOARD	
79	4-308-870-00	CLIP, LEAD WIRE	
80	1-452-032-00	MAGNET, DISK; 10MM ϕ	
81	1-452-094-00	MAGNET, ROTATABLE DISK; 150MM ϕ	
82	X-4309-608-0	PERMALOY ASSY, CONVERGENCE	
83	3-701-007-00	BAND, BINDING	
84	4-314-871-00	CUSHION	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

Note) In this parts list, the mounting diagram is for a different product.
Therefore, an excess of parts is listed.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1135-498-A	B BOARD, COMPLETE			
		*****************			
		<CAPACITOR>			
C301	1-106-228-00	MYLAR	0.22MF	10%	100V
C302	1-106-228-00	MYLAR	0.22MF	10%	100V
C303	1-126-101-11	ELECT	100MF	20%	16V
C304	1-106-228-00	MYLAR	0.22MF	10%	100V
C305	1-124-119-00	ELECT	330MF	20%	16V
C306	1-124-902-00	ELECT	0.47MF	20%	50V
C307	1-124-902-00	ELECT	0.47MF	20%	50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V
C309	1-124-902-00	ELECT	0.47MF	20%	50V
C310	1-106-220-00	MYLAR	0.1MF	10%	100V
C311	1-106-220-00	MYLAR	0.1MF	10%	100V
C312	1-124-902-00	ELECT	0.47MF	20%	50V
C313	1-124-902-00	ELECT	0.47MF	20%	50V
C314	1-124-902-00	ELECT	0.47MF	20%	50V
C315	1-124-499-11	ELECT	1MF	20%	50V
C319	1-124-477-11	ELECT	47MF	20%	16V
C321	1-102-980-00	CERAMIC	270PF	5%	50V
C322	1-101-888-00	CERAMIC	68PF	5%	50V
C325	1-124-477-11	ELECT	47MF	20%	16V
C326	1-101-004-00	CERAMIC	0.01MF		50V
C327	1-101-004-00	CERAMIC	0.01MF		50V
C330	1-101-004-00	CERAMIC	0.01MF		50V
C331	1-124-963-11	ELECT	33MF	20%	16V
C332	1-124-119-00	ELECT	330MF	20%	16V
C333	1-101-005-00	CERAMIC	0.022MF		50V
C334	1-101-884-00	CERAMIC	56PF	5%	50V
C335	1-101-006-00	CERAMIC	0.047MF		50V
C336	1-106-367-00	MYLAR	0.01MF	10%	400V
C337	1-101-004-00	CERAMIC	0.01MF		50V
C338	1-101-888-00	CERAMIC	68PF	5%	50V
C339	1-102-816-00	CERAMIC	120PF	5%	50V
C340	1-102-953-00	CERAMIC	18PF	5%	50V
C341	1-102-978-00	CERAMIC	220PF	5%	50V
C342	1-102-953-00	CERAMIC	18PF	5%	50V
C343	1-102-816-00	CERAMIC	120PF	5%	50V
C344	1-101-888-00	CERAMIC	68PF	5%	50V
C345	1-102-978-00	CERAMIC	220PF	5%	50V
C346	1-102-074-00	CERAMIC	0.001MF	10%	50V
C347	1-124-499-11	ELECT	1MF	20%	50V
C348	1-124-499-11	ELECT	1MF	20%	50V
C349	1-136-173-00	FILM	0.47MF	5%	50V
C350	1-106-383-00	MYLAR	0.047MF	10%	100V
C351	1-106-375-12	MYLAR	0.022MF	10%	250V
C352	1-106-375-12	MYLAR	0.022MF	10%	250V
C354	1-102-074-00	CERAMIC	0.001MF	10%	50V
C355	1-102-816-00	CERAMIC	120PF	5%	50V
C357	1-102-965-00	CERAMIC	39PF	5%	50V
C358	1-124-963-11	ELECT	33MF	20%	16V
C359	1-102-963-00	CERAMIC	33PF	5%	50V
C360	1-101-004-00	CERAMIC	0.01MF		50V
C361	1-101-004-00	CERAMIC	0.01MF		50V
C364	1-101-361-00	CERAMIC	150PF	5%	50V
C365	1-124-477-11	ELECT	47MF	20%	16V
C366	1-124-477-11	ELECT	47MF	20%	16V
C367	1-101-004-00	CERAMIC	0.01MF		50V
C368	1-101-880-00	CERAMIC	47PF	5%	50V
C381	1-124-902-00	ELECT	0.47MF	20%	50V
C382	1-124-927-11	ELECT	4.7MF	20%	50V
C384	1-124-477-11	ELECT	47MF	20%	16V
C385	1-124-927-11	ELECT	4.7MF	20%	50V
C387	1-124-902-00	ELECT	0.47MF	20%	50V
C1311	1-101-884-00	CERAMIC	56PF	5%	50V
		<CONNECTOR>			
CNB31	*1-562-370-21	CONNECTOR, BOARD TO BOARD 18P			
CNB72	*1-564-895-11	PLUG, CONNECTOR 6P			
CNB93	*1-560-278-41	PLUG, CONNECTOR 6P			
		<TRIMMER>			
CT331	1-141-181-11	CAP, TRIMMER			
CT332	1-141-181-11	CAP, TRIMMER			
		<DIODE>			
D301	8-719-911-19	DIODE 1SS119			
D302	8-719-911-19	DIODE 1SS119			
D303	8-719-911-19	DIODE 1SS119			
D304	8-719-911-19	DIODE 1SS119			
D305	8-719-911-19	DIODE 1SS119			
D307	8-719-110-23	DIODE RD11ES-B3			
D309	8-719-911-19	DIODE 1SS119			
D331	8-719-911-19	DIODE 1SS119			
D333	8-719-911-19	DIODE 1SS119			
D341	8-719-911-19	DIODE 1SS119			
		<DELAY LINE>			
DL331	1-415-122-00	DELAY LINE			
DL332	1-236-062-11	MODULE, Y DELAY LINE			
		<IC>			
IC301	8-759-979-85	IC TDA4580-V4			
IC302	8-759-980-60	IC TDA8442-N3			
IC331	8-759-947-20	IC TDA4555-V8			

B

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L301	1-410-868-21	INDUCTOR	4.7UH			
L302	1-410-868-21	INDUCTOR	4.7UH			
L303	1-408-408-00	INDUCTOR	8.2UH			
L304	1-408-409-00	INDUCTOR	10UH			
L331	1-408-408-00	INDUCTOR	8.2UH			
L332	1-404-539-11	COIL				
L333	1-404-554-11	COIL				
L334	1-404-554-11	COIL				
L335	1-404-554-11	COIL				
L336	1-408-417-00	INDUCTOR	47UH			
L338	1-408-416-00	INDUCTOR	39UH			
L339	1-410-868-21	INDUCTOR	4.7UH			
		<TRANSISTOR>				
Q302	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q303	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q305	8-729-900-36	TRANSISTOR	DTC124ES			
Q306	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q311	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q312	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q313	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q316	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q331	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q332	8-729-900-36	TRANSISTOR	DTC124ES			
Q333	8-729-900-36	TRANSISTOR	DTC124ES			
Q334	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q335	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q336	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q381	8-729-900-36	TRANSISTOR	DTC124ES			
Q382	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q1306	8-729-173-38	TRANSISTOR	2SA733-K			
		<RESISTOR>				
R301	1-249-409-11	CARBON	220	5%	1/4W	
R302	1-249-409-11	CARBON	220	5%	1/4W	
R303	1-249-409-11	CARBON	220	5%	1/4W	
R304	1-249-409-11	CARBON	220	5%	1/4W	
R305	1-249-421-11	CARBON	2.2K	5%	1/4W	
R307	1-249-441-11	CARBON	100K	5%	1/4W	
R308	1-249-414-11	CARBON	560	5%	1/4W	
R309	1-249-405-11	CARBON	100	5%	1/4W	
R310	1-249-405-11	CARBON	100	5%	1/4W	
R311	1-249-405-11	CARBON	100	5%	1/4W	
R312	1-249-409-11	CARBON	220	5%	1/4W	
R313	1-249-433-11	CARBON	22K	5%	1/4W	
R314	1-249-413-11	CARBON	470	5%	1/4W	
R315	1-249-407-11	CARBON	150	5%	1/4W	
R316	1-249-407-11	CARBON	150	5%	1/4W	
R317	1-249-407-11	CARBON	150	5%	1/4W	
R318	1-249-429-11	CARBON	10K	5%	1/4W	
R319	1-249-409-11	CARBON	220	5%	1/4W	
R320	1-249-417-11	CARBON	1K	5%	1/4W	
R321	1-249-421-11	CARBON	2.2K	5%	1/4W	
R322	1-249-420-11	CARBON	1.8K	5%	1/4W	
R323	1-249-421-11	CARBON	2.2K	5%	1/4W	
R324	1-249-426-11	CARBON	5.6K	5%	1/4W	
R325	1-249-429-11	CARBON	10K	5%	1/4W	
R326	1-249-419-11	CARBON	1.5K	5%	1/4W	
R327	1-249-427-11	CARBON	6.8K	5%	1/4W	
R328	1-249-397-11	CARBON	22	5%	1/4W	
R329	1-249-397-11	CARBON	22	5%	1/4W	
R330	1-249-397-11	CARBON	22	5%	1/4W	
R331	1-249-418-11	CARBON	1.2K	5%	1/4W	
R332	1-249-401-11	CARBON	47	5%	1/4W	
R333	1-249-412-11	CARBON	390	5%	1/4W	
R334	1-249-408-11	CARBON	180	5%	1/4W	
R335	1-249-415-11	CARBON	680	5%	1/4W	
R336	1-249-418-11	CARBON	1.2K	5%	1/4W	
R337	1-247-848-11	CARBON	5.1K	5%	1/4W	
R338	1-249-429-11	CARBON	10K	5%	1/4W	
R339	1-249-409-11	CARBON	220	5%	1/4W	
R340	1-249-437-11	CARBON	47K	5%	1/4W	
R341	1-249-410-11	CARBON	270	5%	1/4W	
R342	1-249-429-11	CARBON	10K	5%	1/4W	
R343	1-249-429-11	CARBON	10K	5%	1/4W	
R344	1-249-437-11	CARBON	47K	5%	1/4W	
R346	1-249-419-11	CARBON	1.5K	5%	1/4W	
R347	1-249-429-11	CARBON	10K	5%	1/4W	
R348	1-249-437-11	CARBON	47K	5%	1/4W	
R349	1-249-415-11	CARBON	680	5%	1/4W	
R350	1-249-415-11	CARBON	680	5%	1/4W	
R351	1-249-409-11	CARBON	220	5%	1/4W	
R352	1-247-891-00	CARBON	330K	5%	1/4W	
R353	1-247-891-00	CARBON	330K	5%	1/4W	
R354	1-249-409-11	CARBON	220	5%	1/4W	
R355	1-249-423-11	CARBON	3.3K	5%	1/4W	
R356	1-249-427-11	CARBON	6.8K	5%	1/4W	
R358	1-249-409-11	CARBON	220	5%	1/4W	
R359	1-249-437-11	CARBON	47K	5%	1/4W	
R360	1-249-437-11	CARBON	47K	5%	1/4W	
R361	1-249-418-11	CARBON	1.2K	5%	1/4W	
R363	1-249-410-11	CARBON	270	5%	1/4W	
R364	1-249-417-11	CARBON	1K	5%	1/4W	
R365	1-249-417-11	CARBON	1K	5%	1/4W	
R367	1-249-409-11	CARBON	220	5%	1/4W	
R368	1-249-417-11	CARBON	1K	5%	1/4W	
R369	1-249-417-11	CARBON	1K	5%	1/4W	
R370	1-249-418-11	CARBON	1.2K	5%	1/4W	
R371	1-249-417-11	CARBON	1K	5%	1/4W	
R376	1-249-429-11	CARBON	10K	5%	1/4W	
R378	1-249-441-11	CARBON	100K	5%	1/4W	
R379	1-249-441-11	CARBON	100K	5%	1/4W	
R380	1-249-426-11	CARBON	5.6K	5%	1/4W	
R381	1-249-439-11	CARBON	68K	5%	1/4W	
R382	1-247-885-00	CARBON	180K	5%	1/4W	
R383	1-247-893-11	CARBON	390K	5%	1/4W	
R385	1-249-435-11	CARBON	33K	5%	1/4W	
R389	1-247-883-00	CARBON	150K	5%	1/4W	
R390	1-249-411-11	CARBON	330	5%	1/4W	
R391	1-249-404-00	CARBON	82	5%	1/4W	
R392	1-249-402-11	CARBON	56	5%	1/4W	
R393	1-249-402-11	CARBON	56	5%	1/4W	
R394	1-249-402-11	CARBON	56	5%	1/4W	
R398	1-249-433-11	CARBON	22K	5%	1/4W	
R1324	1-249-419-11	CARBON	1.5K	5%	1/4W	
		<VARIABLE RESISTOR>				
RV331	1-238-009-11	RES, ADJ, CARBON 220				

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION				REMARK
T331	1-404-584-11	COIL				

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION				REMARK
X331	1-567-307-11	OSCILLATOR, CRYSTAL				
X332	1-567-131-00	OSCILLATOR, CRYSTAL				

****

*1-629-720-21 F2 BOARD
****

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
CNF262	*1-566-664-11	PIN, CONNECTOR 4P				

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION				REMARK
S1701⚠	1-571-410-11	SWITCH, PUSH (AC POWER)(1 KEY)				

****

*1-629-719-21 F1 BOARD
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1601⚠	1-136-518-11	FILM	0.33MF	20%	300V	
C1602⚠	1-136-519-11	FILM	0.47MF	20%	300V	
C1603⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C1604⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C1605⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C1606⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V	
C1607⚠	1-161-964-61	CERAMIC	0.0047MF		250V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
CNF61	*1-566-664-11	PIN, CONNECTOR 4P				
CNF64	*1-506-348-XX	PIN, CONNECTOR 3P				
CNF65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
CNF66	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P				
CNF67	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)				
CNF162	*1-506-348-XX	PIN, CONNECTOR 4P				

<FUSE>

REF.NO.	PART NO.	DESCRIPTION				REMARK
F1601⚠	1-532-350-11	FUSE, TIME-LAG 4A/250V				
	1-533-087-00	HOLDER, FUSE; F1601				

<FILTER>

REF.NO.	PART NO.	DESCRIPTION				REMARK
LF1601⚠	1-421-866-12	LFT				
LF1602⚠	1-421-776-11	LFT				
LF1603⚠	1-421-592-11	TRANSFORMER, FERRITE				

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1601⚠	1-246-513-75	CARBON	47K	5%	1/4W	
R1602⚠	1-244-945-91	CARBON	1M	5%	1/2W	
R1603⚠	1-217-328-11	WIREWOUND	2.7	10%	7W	F
R1604⚠	1-246-513-75	CARBON	47K	5%	1/4W	
R1605⚠	1-218-265-91	METAL GLAZE	8.2M	5%	1W	

<THERMISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
THP601⚠	1-808-059-31	THERMISTOR, POSITIVE				

****

*A-1296-476-A A BOARD, COMPLETE
****

REF.NO.	PART NO.	DESCRIPTION				REMARK
⚠	1-465-053-11	TUNER, ET (UV-615S)				
	*4-380-698-01	CASE (MAIN), SHIELD, A1				
	*4-380-699-01	CASE (UPPER LID), SHIELD, A1				
	*4-382-701-01	CASE (BOTTOM LID), SHIELD, A2				

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C101	1-126-233-11	ELECT	22MF	20%	50V	
C102	1-126-103-11	ELECT	470MF	20%	16V	
C103	1-106-220-00	MYLAR	0.1MF	10%	100V	
C104	1-106-216-00	MYLAR	0.068MF	10%	100V	
C105	1-106-216-00	MYLAR	0.068MF	10%	100V	
C106	1-101-004-00	CERAMIC	0.01MF		50V	
C107	1-102-963-00	CERAMIC	33PF	5%	50V	
C108	1-124-963-11	ELECT	33MF	20%	16V	
C109	1-101-003-00	CERAMIC	0.0047MF		50V	
C110	1-124-499-11	ELECT	1MF	20%	50V	
C111	1-101-003-00	CERAMIC	0.0047MF		50V	
C112	1-101-003-00	CERAMIC	0.0047MF		50V	
C113	1-101-003-00	CERAMIC	0.0047MF		50V	
C114	1-124-963-11	ELECT	33MF	20%	16V	
C118	1-101-880-00	CERAMIC	47PF	5%	50V	
C119	1-126-101-11	ELECT	100MF	20%	16V	
C120	1-124-925-11	ELECT	2.2MF	20%	50V	
C121	1-101-003-00	CERAMIC	0.0047MF		50V	
C122	1-101-003-00	CERAMIC	0.0047MF		50V	
C123	1-101-003-00	CERAMIC	0.0047MF		50V	
C124	1-101-888-00	CERAMIC	68PF	5%	50V	
C125	1-101-888-00	CERAMIC	68PF	5%	50V	
C127	1-101-003-00	CERAMIC	0.0047MF		50V	
C128	1-124-963-11	ELECT	33MF	20%	16V	
C129	1-101-888-00	CERAMIC	68PF	5%	50V	
C130	1-101-004-00	CERAMIC	0.01MF		50V	
C131	1-101-006-00	CERAMIC	0.047MF		50V	
C132	1-124-499-11	ELECT	1MF	20%	50V	
C133	1-101-003-00	CERAMIC	0.0047MF		50V	
C134	1-124-499-11	ELECT	1MF	20%	50V	
C135	1-101-004-00	CERAMIC	0.01MF		50V	
C136	1-101-006-00	CERAMIC	0.047MF		50V	
C137	1-101-880-00	CERAMIC	47PF	5%	50V	
C138	1-124-925-11	ELECT	2.2MF	20%	50V	
C139	1-123-875-11	ELECT	10MF	20%	50V	
C140	1-108-614-11	MYLAR	0.001MF	10%	100V	
C141	1-136-298-00	FILM	0.0033MF	2%	100V	
C142	1-102-816-00	CERAMIC	120PF	5%	50V	
C143	1-101-361-00	CERAMIC	150PF	5%	50V	
C144	1-124-477-11	ELECT	47MF	20%	16V	
C145	1-124-477-11	ELECT	47MF	20%	16V	
C146	1-124-477-11	ELECT	47MF	20%	16V	
C147	1-124-477-11	ELECT	47MF	20%	16V	
C148	1-123-875-11	ELECT	10MF	20%	50V	
C149	1-136-153-00	FILM	0.01MF	5%	50V	
C150	1-136-153-00	FILM	0.01MF	5%	50V	
C151	1-126-233-11	ELECT	22MF	20%	50V	
C152	1-126-233-11	ELECT	22MF	20%	50V	
C153	1-136-165-00	FILM	0.1MF	5%	50V	
C154	1-136-169-00	FILM	0.22MF	5%	50V	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C155	1-124-963-11	ELECT	33MF	20%	16V
C156	1-136-157-00	FILM	0.022MF	5%	50V
C157	1-136-161-00	FILM	0.047MF	5%	50V
C158	1-124-963-11	ELECT	33MF	20%	16V
C159	1-124-477-11	ELECT	47MF	20%	16V
C161	1-124-477-11	ELECT	47MF	20%	16V
C162	1-102-816-00	CERAMIC	120PF	5%	50V
C163	1-124-927-11	ELECT	4.7MF	20%	50V
C164	1-106-367-00	MYLAR	0.01MF	10%	400V
C165	1-136-287-11	FILM	0.0047MF	5%	50V
C167	1-124-499-11	ELECT	1MF	20%	50V
C168	1-106-228-00	MYLAR	0.22MF	10%	100V
C169	1-123-875-11	ELECT	10MF	20%	50V
C174	1-124-499-11	ELECT	1MF	20%	50V
C177	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C187	1-101-003-00	CERAMIC	0.0047MF		50V
C188	1-124-963-11	ELECT	33MF	20%	16V
C189	1-124-963-11	ELECT	33MF	20%	16V
C190	1-106-220-00	MYLAR	0.1MF	10%	100V

<FILTER>

CD102	1-404-745-11	DISCRIMINATOR, CERAMIC
CD103	1-404-746-11	DISCRIMINATOR, CERAMIC
CF101	1-404-134-00	TRAP, CERAMIC (5.5MHZ)
CF103	1-527-840-00	FILTER, CERAMIC
CF104	1-527-839-00	FILTER, CERAMIC
SWF101	1-577-254-11	SAWF

<CONNECTOR>

CNA11	*1-566-659-11	CONNECTOR, HINGE (SOCKET) 18P

<DIODE>

D105	8-719-109-92	DIODE RD6.2ES-B1
D106	8-719-911-19	DIODE 1SS119
D108	8-719-000-06	DIODE MC921
D110	8-719-911-19	DIODE 1SS119
D111	8-719-109-68	DIODE RD3.6ES-B1

<IC>

IC101	8-759-909-08	IC TDA3541
IC102	8-759-973-86	IC TDA2558
IC103	8-759-030-48	IC TDA6600-2
IC104	8-759-946-99	IC TDA2595-V7

<COIL>

L101	1-408-226-00	INDUCTOR	82UH
L102	1-410-116-11	INDUCTOR	0.56MMH
L103	1-408-406-00	INDUCTOR	5.6UH
L104	1-408-411-00	INDUCTOR	15UH
L106	1-408-415-00	INDUCTOR	33UH
L107	1-408-406-00	INDUCTOR	5.6UH
L108	1-408-412-00	INDUCTOR	18UH
L109	1-408-412-00	INDUCTOR	18UH
L110	1-410-064-11	INDUCTOR	2.7MMH
L111	1-408-421-00	INDUCTOR	100UH
L113	1-408-399-00	INDUCTOR	1.5UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q101	8-729-900-61	TRANSISTOR DTA114ES	
Q102	8-729-900-61	TRANSISTOR DTA114ES	
Q103	8-729-900-61	TRANSISTOR DTA114ES	
Q104	8-729-900-61	TRANSISTOR DTA114ES	
Q105	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q106	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q107	8-729-173-38	TRANSISTOR 2SA733-K	
Q108	8-729-900-65	TRANSISTOR DTA144ES	
Q109	8-729-900-89	TRANSISTOR DTC144ES	
Q110	8-729-173-38	TRANSISTOR 2SA733-K	
Q111	8-729-900-89	TRANSISTOR DTC144ES	
Q112	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q113	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q116	8-729-900-65	TRANSISTOR DTA144ES	
Q117	8-729-173-38	TRANSISTOR 2SA733-K	

<RESISTOR>

R101	1-249-405-11	CARBON	100	5%	1/4W
R102	1-249-423-11	CARBON	3.3K	5%	1/4W
R103	1-249-433-11	CARBON	22K	5%	1/4W
R104	1-249-429-11	CARBON	10K	5%	1/4W
R105	1-249-418-11	CARBON	1.2K	5%	1/4W
R106	1-247-891-00	CARBON	330K	5%	1/4W
R107	1-249-421-11	CARBON	2.2K	5%	1/4W
R108	1-249-421-11	CARBON	2.2K	5%	1/4W
R109	1-249-423-11	CARBON	3.3K	5%	1/4W
R110	1-249-410-11	CARBON	270	5%	1/4W
R111	1-249-418-11	CARBON	1.2K	5%	1/4W
R112	1-249-421-11	CARBON	2.2K	5%	1/4W
R114	1-249-413-11	CARBON	470	5%	1/4W
R115	1-249-413-11	CARBON	470	5%	1/4W
R116	1-249-419-11	CARBON	1.5K	5%	1/4W
R117	1-249-431-11	CARBON	15K	5%	1/4W
R118	1-249-425-11	CARBON	4.7K	5%	1/4W
R119	1-249-417-11	CARBON	1K	5%	1/4W
R121	1-249-429-11	CARBON	10K	5%	1/4W
R122	1-249-436-11	CARBON	39K	5%	1/4W
R123	1-249-417-11	CARBON	1K	5%	1/4W
R124	1-249-423-11	CARBON	3.3K	5%	1/4W
R125	1-249-429-11	CARBON	10K	5%	1/4W
R126	1-249-436-11	CARBON	39K	5%	1/4W
R127	1-249-432-11	CARBON	18K	5%	1/4W
R128	1-249-432-11	CARBON	18K	5%	1/4W
R129	1-249-429-11	CARBON	10K	5%	1/4W
R130	1-249-429-11	CARBON	10K	5%	1/4W
R132	1-249-414-11	CARBON	560	5%	1/4W
R133	1-249-425-11	CARBON	4.7K	5%	1/4W
R134	1-249-414-11	CARBON	560	5%	1/4W
R135	1-249-419-11	CARBON	1.5K	5%	1/4W
R136	1-249-414-11	CARBON	560	5%	1/4W
R137	1-249-414-11	CARBON	560	5%	1/4W
R138	1-249-419-11	CARBON	1.5K	5%	1/4W
R139	1-249-431-11	CARBON	15K	5%	1/4W
R140	1-249-441-11	CARBON	100K	5%	1/4W
R141	1-249-425-11	CARBON	4.7K	5%	1/4W
R142	1-249-441-11	CARBON	100K	5%	1/4W
R143	1-249-441-11	CARBON	100K	5%	1/4W
R144	1-249-422-11	CARBON	2.7K	5%	1/4W
R146	1-249-424-11	CARBON	3.9K	5%	1/4W
R148	1-249-413-11	CARBON	470	5%	1/4W
R150	1-249-423-11	CARBON	3.3K	5%	1/4W
R151	1-249-423-11	CARBON	3.3K	5%	1/4W
R152	1-249-431-11	CARBON	15K	5%	1/4W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R153	1-249-416-11	CARBON	820	5%	1/4W	
R154	1-249-441-11	CARBON	100K	5%	1/4W	
R155	1-249-430-11	CARBON	12K	5%	1/4W	
R156	1-247-881-00	CARBON	120K	5%	1/4W	
R163	1-249-424-11	CARBON	3.9K	5%	1/4W	
R165	1-249-423-11	CARBON	3.3K	5%	1/4W	
R166	1-249-437-11	CARBON	47K	5%	1/4W	
R174	1-249-429-11	CARBON	10K	5%	1/4W	
R175	1-249-429-11	CARBON	10K	5%	1/4W	
R188	1-249-419-11	CARBON	1.5K	5%	1/4W	
R189	1-249-419-11	CARBON	1.5K	5%	1/4W	

<VARIABLE RESISTOR>

RV101	1-237-753-11	RES, ADJ, CARBON	47K
RV102	1-237-751-11	RES, ADJ, CARBON	10K
RV103	1-237-753-11	RES, ADJ, CARBON	47K

<TRANSFORMER>

T101	1-404-493-00	COIL
T102	1-404-493-00	COIL
T103	1-404-493-00	COIL

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*A-1330-850-A C BOARD, COMPLETE

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*4-379-160-01	COVER (REAR LID), CV
*4-379-167-01	COVER (MAIN), CV
*4-386-664-01	SPRING

<CAPACITOR>

C703	1-102-980-00	CERAMIC	270PF	5%	50V
C704	1-102-116-00	CERAMIC	680PF	10%	50V
C705	1-102-976-00	CERAMIC	180PF	5%	50V
C706	1-102-116-00	CERAMIC	680PF	10%	50V
C707	1-162-116-00	CERAMIC	680PF	10%	2KV
C708	1-162-114-00	CERAMIC	0.0047MF		2KV
C709	1-102-116-00	CERAMIC	680PF	10%	50V
C710	1-123-947-00	ELECT	10MF	20%	250V
C711	1-101-880-00	CERAMIC	47PF	5%	50V
C712	1-102-980-00	CERAMIC	270PF	5%	50V
C714	1-124-360-00	ELECT	1000MF	20%	16V
C716	1-162-622-11	CERAMIC	330PF	10%	400V
C717	1-102-114-00	CERAMIC	470PF	10%	50V
C718	1-102-114-00	CERAMIC	470PF	10%	50V
C719	1-102-114-00	CERAMIC	470PF	10%	50V

<CONNECTOR>

CNC71	*1-506-371-00	PIN, CONNECTOR 2P
CNC72	*1-564-883-11	PLUG, CONNECTOR 6P
CNC81	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)
CNC82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P

<DIODE>

D701	8-719-110-14	DIODE RD9.1ES-B3
D702	8-719-911-19	DIODE 1SS119
D703	8-719-911-19	DIODE 1SS119
D704	8-719-911-19	DIODE 1SS119
D705	8-719-911-19	DIODE 1SS119
D706	8-719-911-19	DIODE 1SS119
D707	8-719-911-19	DIODE 1SS119
D708	8-719-911-19	DIODE 1SS119
D709	8-719-911-19	DIODE 1SS119
D710	8-719-911-19	DIODE 1SS119
D711	8-719-925-06	DIODE ERC25-06S
D713	8-719-911-19	DIODE 1SS119

<JACK>

J701	1-526-798-51	SOCKET, PICTURE TUBE

<COIL>

L704	1-410-878-21	INDUCTOR	33UH

<TRANSISTOR>

Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q703	8-729-326-11	TRANSISTOR 2SC2611
Q704	8-729-200-17	TRANSISTOR 2SA1091
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q706	8-729-326-11	TRANSISTOR 2SC2611
Q707	8-729-200-17	TRANSISTOR 2SA1091
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q709	8-729-326-11	TRANSISTOR 2SC2611
Q710	8-729-200-17	TRANSISTOR 2SA1091

<RESISTOR>

R704	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R705	1-202-824-00	SOLID	3.3K	10%	1/2W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-247-822-11	CARBON	430	5%	1/4W	
R708	1-249-401-11	CARBON	47	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R710	1-215-469-00	METAL	100K	1%	1/6W	
R712	1-249-417-11	CARBON	1K	5%	1/4W	
R713	1-215-474-00	METAL	160K	1%	1/6W	
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-202-824-00	SOLID	3.3K	10%	1/2W	
R716	1-249-409-11	CARBON	220	5%	1/4W	
R717	1-249-415-11	CARBON	680	5%	1/4W	
R718	1-202-814-11	SOLID	33K	10%	1/2W	
R719	1-249-401-11	CARBON	47	5%	1/4W	
R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
R721	1-202-842-11	SOLID	220K	10%	1/2W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R724	1-202-846-00	SOLID	470K	10%	1/2W	
R725	1-202-838-00	SOLID	100K	10%	1/2W	
R726	1-202-824-00	SOLID	3.3K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R729	1-249-416-11	CARBON	820	5%	1/4W	
R730	1-249-401-11	CARBON	47	5%	1/4W	
R731	1-249-423-11	CARBON	3.3K	5%	1/4W	
R732	1-249-415-11	CARBON	680	5%	1/4W	
R733	1-249-415-11	CARBON	680	5%	1/4W	
R734	1-249-405-11	CARBON	100	5%	1/4W	
R735	1-215-493-00	METAL	1M	1%	1/6W	
R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R737	1-215-487-00	METAL	560K	1%	1/6W	
R739	1-249-417-11	CARBON	1K	5%	1/4W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M	
RV703	1-237-749-11	RES, ADJ, CARBON 2200	
RV704	1-237-749-11	RES, ADJ, CARBON 2200	

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	*A-1345-721-A	D BOARD, COMPLETE

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	*4-341-751-01	EYELET
	*4-341-752-01	EYELET

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C001	1-102-973-00	CERAMIC	100PF	5%	50V
C003	1-106-220-00	MYLAR	0.1MF	10%	100V
C004	1-123-875-11	ELECT	10MF	20%	50V
C005	1-102-074-00	CERAMIC	0.001MF	10%	50V
C007	1-106-383-00	MYLAR	0.047MF	10%	100V
C008	1-101-880-00	CERAMIC	47PF	5%	50V
C009	1-101-884-00	CERAMIC	56PF	5%	50V
C010	1-124-122-11	ELECT	100MF	20%	50V
C011	1-101-004-00	CERAMIC	0.01MF		50V
C012	1-124-122-11	ELECT	100MF	20%	50V
C013	1-101-004-00	CERAMIC	0.01MF		50V
C014	1-124-463-00	ELECT	0.1MF	20%	50V
C015	1-124-910-11	ELECT	47MF	20%	50V
C016	1-101-004-00	CERAMIC	0.01MF		50V
C017	1-123-875-11	ELECT	10MF	20%	50V
C018	1-102-980-00	CERAMIC	270PF	5%	50V
C019	1-106-383-00	MYLAR	0.047MF	10%	100V
C020	1-102-973-00	CERAMIC	100PF	5%	50V
C021	1-102-973-00	CERAMIC	100PF	5%	50V
C022	1-124-910-11	ELECT	47MF	20%	50V
C023	1-124-499-11	ELECT	1MF	20%	50V
C024	1-124-499-11	ELECT	1MF	20%	50V
C025	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C026	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C027	1-106-220-00	MYLAR	0.1MF	10%	100V
C028	1-101-361-00	CERAMIC	150PF	5%	50V
C029	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C030	1-102-953-00	CERAMIC	18PF	5%	50V
C251	1-124-927-11	ELECT	4.7MF	20%	50V
C252	1-124-927-11	ELECT	4.7MF	20%	50V
C253	1-124-122-11	ELECT	100MF	20%	50V
C254	1-124-927-11	ELECT	4.7MF	20%	50V
C255	1-124-927-11	ELECT	4.7MF	20%	50V
C256	1-106-220-00	MYLAR	0.1MF	10%	100V
C257	1-101-004-00	CERAMIC	0.01MF		50V
C258	1-106-220-00	MYLAR	0.1MF	10%	100V
C260	1-106-220-00	MYLAR	0.1MF	10%	100V
C265	1-102-074-00	CERAMIC	0.001MF	10%	50V
C266	1-102-074-00	CERAMIC	0.001MF	10%	50V
C401	1-124-910-11	ELECT	47MF	20%	50V
C403	1-124-910-11	ELECT	47MF	20%	50V
C501	1-124-927-11	ELECT	4.7MF	20%	50V
C502	1-124-927-11	ELECT	4.7MF	20%	50V
C503	1-106-371-00	MYLAR	0.015MF	10%	400V
C504	1-101-361-00	CERAMIC	150PF	5%	50V
C505	1-108-794-11	MYLAR	0.0015MF	5%	50V
C506	1-106-375-12	MYLAR	0.022MF	10%	250V
C507	1-130-783-00	MYLAR	0.33MF	10%	100V
C508	1-106-375-12	MYLAR	0.022MF	10%	250V
C509	1-106-220-00	MYLAR	0.1MF	10%	100V
C510	1-161-959-00	CERAMIC	22PF	10%	500V
C511	1-108-620-11	MYLAR	0.0033MF	10%	100V
C512	1-106-220-00	MYLAR	0.1MF	10%	100V
C513	1-108-614-11	MYLAR	0.001MF	10%	100V
C514	1-106-228-00	MYLAR	0.22MF	10%	100V
C515	1-124-499-11	ELECT	1MF	20%	50V
C516	1-108-614-11	MYLAR	0.001MF	10%	100V
C517	1-124-252-00	ELECT	0.33MF	20%	50V
C518	1-124-902-00	ELECT	0.47MF	20%	50V
C519	1-136-173-00	FILM	0.47MF	5%	50V
C520	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C521	1-106-220-00	MYLAR	0.1MF	10%	100V
C522	1-124-122-11	ELECT	100MF	20%	50V
C523	1-108-614-11	MYLAR	0.001MF	10%	100V
C524	1-108-798-11	MYLAR	0.0033MF	5%	50V
C525	1-102-973-00	CERAMIC	100PF	5%	50V
C526	1-102-951-00	CERAMIC	15PF	5%	50V
C527	1-106-220-00	MYLAR	0.1MF	10%	100V
C531	1-124-190-00	ELECT	680MF	10%	25V
C532	1-124-122-11	ELECT	100MF	20%	50V
C533	1-106-216-00	MYLAR	0.068MF	10%	100V
C534	1-124-120-11	ELECT	220MF	20%	16V
C536	1-131-363-00	TANTALUM	4.7MF	10%	16V
C537	1-124-499-11	ELECT	1MF	20%	50V
C538	1-108-614-11	MYLAR	0.001MF	10%	100V
C539	1-102-820-00	CERAMIC	330PF	5%	50V
C591	1-123-875-11	ELECT	10MF	20%	50V
C592	1-124-910-11	ELECT	47MF	20%	50V
C593	1-102-820-00	CERAMIC	330PF	5%	50V
C601	1-162-599-12	CERAMIC	0.0047MF		250V
C602	1-162-599-12	CERAMIC	0.0047MF		250V
C603	1-162-599-12	CERAMIC	0.0047MF		250V
C604	1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C605	1-124-122-11	ELECT	100MF	20%	50V
C606	1-106-220-00	MYLAR	0.1MF	10%	100V
C607	1-130-019-00	FILM	0.0012MF	5%	50V
C608	1-123-875-11	ELECT	10MF	20%	50V
C611	1-124-122-11	ELECT	100MF	20%	50V
C612	1-162-115-00	CERAMIC	330PF	10%	2KV
C613	1-136-539-11	FILM	0.0022MF	3%	2KV
C614	1-102-030-00	CERAMIC	330PF	10%	500V
C615	1-124-557-11	ELECT	1000MF	20%	25V
C616	1-102-030-00	CERAMIC	330PF	10%	500V
C618	1-124-637-11	ELECT	1000MF	20%	50V
C619	1-124-556-11	ELECT	2200MF	20%	16V
C620	1-102-074-00	CERAMIC	0.001MF	10%	50V
C621	1-124-347-00	ELECT	100MF	20%	160V
C622	1-124-556-11	ELECT	2200MF	20%	16V
C623	1-124-910-11	ELECT	47MF	20%	50V
C624	1-124-122-11	ELECT	100MF	20%	50V
C625	1-124-360-00	ELECT	1000MF	20%	16V
C626	1-123-875-11	ELECT	10MF	20%	50V
C627	1-102-074-00	CERAMIC	0.001MF	10%	50V
C631	1-123-875-11	ELECT	10MF	20%	50V
C632	1-102-074-00	CERAMIC	0.001MF	10%	50V
C633	1-124-927-11	ELECT	4.7MF	20%	50V
C636	1-123-382-00	ELECT	3.3MF	20%	50V
C801	1-126-105-11	ELECT	1000MF	20%	35V
C802	1-102-030-00	CERAMIC	330PF	10%	500V
C804	1-123-948-00	ELECT	22MF	20%	250V
C805	1-162-114-00	CERAMIC	0.0047MF		2KV

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C806	1-106-220-00	MYLAR	0.1MF	10%	100V
C807	1-106-395-00	MYLAR	0.15MF	10%	200V
C810	1-124-494-00	ELECT	33MF		160V
C811	1-136-111-00	FILM	1MF	5%	200V
C812	1-124-634-11	ELECT	1MF	20%	250V
C813	1-102-212-00	CERAMIC	820PF	10%	500V
C814	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C815	1-136-111-00	FILM	1MF	5%	200V
C817	1-136-549-11	FILM	0.0106MF	3%	1.4KV
C818	1-136-759-11	FILM	0.039MF	10%	630V
C819⚠.	1-161-731-11	CERAMIC	0.001MF	10%	2KV
C820	1-106-218-00	MYLAR	0.0082MF	10%	400V
C821⚠.	1-162-116-51	CERAMIC	680PF	10%	2KV
C822	1-102-114-00	CERAMIC	470PF	10%	50V
C823	1-106-359-00	MYLAR	0.0047MF	10%	400V
C824	1-102-212-00	CERAMIC	820PF	10%	500V
C825	1-106-375-12	MYLAR	0.022MF	10%	250V
C826	1-123-875-11	ELECT	10MF	20%	50V

<FILTER>

CF001	1-567-686-11	OSCILLATOR, CERAMIC
CF501	1-567-888-11	OSCILLATOR, CERAMIC

<CONNECTOR>

CN801	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CND01	*1-564-884-11	PLUG, CONNECTOR 7P
CND02	*1-564-886-11	PLUG, CONNECTOR 9P
CND11	*1-566-660-11	CONNECTOR, HINGE (PLUG) 18P
CND12	*1-564-884-11	PLUG, CONNECTOR 7P
CND18	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
CND19	*1-564-881-11	PLUG, CONNECTOR 4P
CND21	*1-564-346-00	CONNECTOR, BOARD TO BOARD 18P
CND23	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)
CND31	*1-564-346-00	CONNECTOR, BOARD TO BOARD 18P
CND41	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)
CND45	*1-564-882-11	PLUG, CONNECTOR 5P
CND51	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)
CND64	*1-506-348-XX	PIN, CONNECTOR 3P
CND68	*1-564-879-11	PLUG, CONNECTOR 2P
CND82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CND83	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CND84	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P
CND91	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P
CND92	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P
CND94	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)

<DIODE>

D001	8-719-911-19	DIODE 1SS119
D002	8-719-911-19	DIODE 1SS119
D003	8-719-911-19	DIODE 1SS119
D004	8-719-911-19	DIODE 1SS119
D005	8-719-109-71	DIODE RD3.9ES-B1
D007	8-719-109-89	DIODE RD5.6ES-B2
D008	8-719-110-85	DIODE RD36ES-B4
D009	8-719-109-89	DIODE RD5.6ES-B2
D011	8-719-911-19	DIODE 1SS119
D012	8-719-911-19	DIODE 1SS119
D013	8-719-911-19	DIODE 1SS119
D254	8-719-110-14	DIODE RD9.1ES-B3
D501	8-719-911-19	DIODE 1SS119
D504	8-719-911-55	DIODE U05G

REF.NO.	PART NO.	DESCRIPTION	REMARK
D506	8-719-000-12	DIODE MC931	
D508	8-719-911-19	DIODE 1SS119	
D511	8-719-911-55	DIODE U05G	
D512	8-719-911-55	DIODE U05G	
D513	8-719-109-81	DIODE RD4.7ES-B2	
D591	8-719-911-19	DIODE 1SS119	
D592	8-719-911-19	DIODE 1SS119	
D593	8-719-911-19	DIODE 1SS119	
D601	8-719-946-90	DIODE KBU4JL-6088	
D602	8-719-925-06	DIODE ERC25-06S	
D603	8-719-911-55	DIODE U05G	
D604	8-719-911-55	DIODE U05G	
D605	8-719-911-55	DIODE U05G	
D606	8-719-925-06	DIODE ERC25-06S	
D607	8-719-925-06	DIODE ERC25-06S	
D608	8-719-925-06	DIODE ERC25-06S	
D610	8-719-300-59	DIODE CTU-12S	
D611	8-719-928-08	DIODE ERD28-06S	
D612	8-719-300-59	DIODE CTU-12S	
D613	8-719-925-06	DIODE ERC25-06S	
D614	8-719-925-06	DIODE ERC25-06S	
D615	8-719-109-90	DIODE RD5.6ES-B3	
D616	8-719-109-93	DIODE RD6.2ES-B2	
D618	8-719-109-89	DIODE RD5.6ES-B2	
D620	8-719-000-12	DIODE MC931	
D622	8-719-911-19	DIODE 1SS119	
D623	8-719-911-19	DIODE 1SS119	
D624	8-719-911-19	DIODE 1SS119	
D627	8-719-911-19	DIODE 1SS119	
D630	8-719-110-39	DIODE RD15ES-B1	
D632	8-719-110-16	DIODE RD10ES-B1	
D633	8-719-911-19	DIODE 1SS119	
D801	8-719-925-06	DIODE ERC25-06S	
D802	8-719-925-06	DIODE ERC25-06S	
D803	8-719-300-65	DIODE ES1F	
D804	8-719-911-55	DIODE U05G	
D805	8-719-911-55	DIODE U05G	
D806	8-719-945-80	DIODE ERC06-15S	
D808	8-719-928-08	DIODE ERD28-08S	
D809	8-719-925-06	DIODE ERC25-06S	

<IC>

IC001	8-759-630-06	IC M50436-614SP
IC002	8-759-979-57	IC MB88503H-1022G
IC003	8-759-603-41	IC M58655P
IC004	8-759-157-40	IC UPC574J
IC251	8-759-803-31	IC LA4280
	*4-368-683-01	SPRING; IC251
IC401	8-752-006-12	IC CX20061
IC501	8-759-970-73	IC TEA2028B
IC502	8-759-944-57	IC TDA8170
	*4-381-724-01	HOLDER, IC; IC502
IC601	8-759-946-23	IC TEA2164
IC608	8-759-700-06	IC UPC7812H

<COIL>

L001	1-408-414-00	INDUCTOR	27UH
L501	1-408-225-00	INDUCTOR	3.3UH
L601	*1-420-872-00	COIL, AIR CORE	
L602	1-410-396-41	FERRITE BEAD INDUCTOR	
L603	1-410-396-41	FERRITE BEAD INDUCTOR	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
L605	1-459-442-00	COIL (WITH CORE)	
L606	1-421-013-00	COIL, (HOLIZONTAL CHOKE) 25UH	
L607	1-408-421-00	INDUCTOR 100UH	
L803	1-459-104-00	COIL,DUST CORE	
L804	1-408-239-00	INDUCTOR 4.7MMH	
L805	1-459-652-12	HLC	
L806	1-459-115-00	COIL,DCC-H	
L807	1-407-504-00	INDUCTOR 10MMH	
L809	*1-420-872-00	COIL, AIR CORE	
L810	1-459-390-00	COIL (WITH CORE)	

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS601⚠	1-532-984-91	LINK, IC 2A	
PS602⚠	1-532-675-91	LINK, IC 1.5A	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q001	8-729-600-24	TRANSISTOR 2SC403SP-51	
Q002	8-729-173-38	TRANSISTOR 2SA733-K	
Q003	8-729-173-38	TRANSISTOR 2SA733-K	
Q004	8-729-173-38	TRANSISTOR 2SA733-K	
Q252	8-729-900-36	TRANSISTOR DTC124ES	
Q501	8-729-173-38	TRANSISTOR 2SA733-K	
Q502	8-729-173-38	TRANSISTOR 2SA733-K	
Q503	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-114-96	TRANSISTOR 2SD774-34	
Q506	8-729-140-97	TRANSISTOR 2SB734-34	
Q507	8-729-173-38	TRANSISTOR 2SA733-K	
Q591	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q598	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q601	8-729-122-03	TRANSISTOR 2SA1220A-Q	
Q602	8-729-209-02	TRANSISTOR 2SD1548-LB	
	*4-368-683-01	SPRING; Q602	
Q603	8-729-820-15	TRANSISTOR 2SB1185-E	
Q604	8-729-308-92	TRANSISTOR 2SD789-03C	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF	
Q608	*4-368-683-01	SPRING	
Q609	8-729-308-92	TRANSISTOR 2SD789-03C	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q804	8-729-304-50	TRANSISTOR 2SD1941-06	
	*4-368-683-01	SPRING; Q804	
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R001	1-249-417-11	CARBON	1K	5%	1/4W	
R002	1-249-417-11	CARBON	1K	5%	1/4W	
R003	1-249-417-11	CARBON	1K	5%	1/4W	
R004	1-249-417-11	CARBON	1K	5%	1/4W	
R005	1-249-407-11	CARBON	150	5%	1/4W	
R006	1-249-417-11	CARBON	1K	5%	1/4W	
R007	1-249-405-11	CARBON	100	5%	1/4W	
R008	1-249-417-11	CARBON	1K	5%	1/4W	
R009	1-249-417-11	CARBON	1K	5%	1/4W	
R010	1-249-413-11	CARBON	470	5%	1/4W	
R011	1-249-417-11	CARBON	1K	5%	1/4W	
R012	1-249-417-11	CARBON	1K	5%	1/4W	
R013	1-249-417-11	CARBON	1K	5%	1/4W	
R014	1-249-417-11	CARBON	1K	5%	1/4W	
R016	1-249-429-11	CARBON	10K	5%	1/4W	
R017	1-249-417-11	CARBON	1K	5%	1/4W	
R018	1-249-417-11	CARBON	1K	5%	1/4W	
R019	1-249-433-11	CARBON	22K	5%	1/4W	
R020	1-249-433-11	CARBON	22K	5%	1/4W	
R021	1-249-433-11	CARBON	22K	5%	1/4W	
R022	1-249-433-11	CARBON	22K	5%	1/4W	
R023	1-249-429-11	CARBON	10K	5%	1/4W	
R024	1-249-429-11	CARBON	10K	5%	1/4W	
R025	1-249-417-11	CARBON	1K	5%	1/4W	
R026	1-249-417-11	CARBON	1K	5%	1/4W	
R027	1-249-417-11	CARBON	1K	5%	1/4W	
R028	1-249-417-11	CARBON	1K	5%	1/4W	
R029	1-249-417-11	CARBON	1K	5%	1/4W	
R030	1-249-425-11	CARBON	4.7K	5%	1/4W	
R031	1-249-429-11	CARBON	10K	5%	1/4W	
R032	1-249-417-11	CARBON	1K	5%	1/4W	
R033	1-249-413-11	CARBON	470	5%	1/4W	
R034	1-249-413-11	CARBON	470	5%	1/4W	
R035	1-249-431-11	CARBON	15K	5%	1/4W	
R036	1-249-421-11	CARBON	2.2K	5%	1/4W	
R037	1-249-417-11	CARBON	1K	5%	1/4W	
R038	1-249-417-11	CARBON	1K	5%	1/4W	
R039	1-249-417-11	CARBON	1K	5%	1/4W	
R040	1-249-417-11	CARBON	1K	5%	1/4W	
R041	1-249-417-11	CARBON	1K	5%	1/4W	
R042	1-249-417-11	CARBON	1K	5%	1/4W	
R043	1-249-417-11	CARBON	1K	5%	1/4W	
R044	1-249-429-11	CARBON	10K	5%	1/4W	
R045	1-249-417-11	CARBON	1K	5%	1/4W	
R046	1-249-429-11	CARBON	10K	5%	1/4W	
R047	1-249-409-11	CARBON	220	5%	1/4W	
R048	1-249-417-11	CARBON	1K	5%	1/4W	
R049	1-249-417-11	CARBON	1K	5%	1/4W	
R050	1-249-433-11	CARBON	22K	5%	1/4W	
R051	1-249-429-11	CARBON	10K	5%	1/4W	
R052	1-249-439-11	CARBON	68K	5%	1/4W	
R053	1-249-437-11	CARBON	47K	5%	1/4W	
R054	1-249-417-11	CARBON	1K	5%	1/4W	
R055	1-249-433-11	CARBON	22K	5%	1/4W	
R056	1-249-440-11	CARBON	82K	5%	1/4W	
R057	1-249-409-11	CARBON	220	5%	1/4W	
R058	1-249-409-11	CARBON	220	5%	1/4W	
R059	1-249-435-11	CARBON	33K	5%	1/4W	
R060	1-249-436-11	CARBON	39K	5%	1/4W	
R061	1-249-417-11	CARBON	1K	5%	1/4W	
R062	1-249-411-11	CARBON	330	5%	1/4W	
R063	1-249-431-11	CARBON	15K	5%	1/4W	
R064	1-249-429-11	CARBON	10K	5%	1/4W	
R067	1-249-413-11	CARBON	470	5%	1/4W	
R068	1-249-421-11	CARBON	2.2K	5%	1/4W	
R069	1-249-423-11	CARBON	3.3K	5%	1/4W	
R070	1-249-417-11	CARBON	1K	5%	1/4W	
R071	1-249-417-11	CARBON	1K	5%	1/4W	
R072	1-249-417-11	CARBON	1K	5%	1/4W	
R073	1-249-417-11	CARBON	1K	5%	1/4W	
R074	1-249-417-11	CARBON	1K	5%	1/4W	
R075	1-249-417-11	CARBON	1K	5%	1/4W	
R077	1-249-413-11	CARBON	470	5%	1/4W	
R078	1-249-423-11	CARBON	3.3K	5%	1/4W	
R079	1-249-435-11	CARBON	33K	5%	1/4W	
R080	1-249-429-11	CARBON	10K	5%	1/4W	
R081	1-249-441-11	CARBON	100K	5%	1/4W	
R082	1-249-409-11	CARBON	220	5%	1/4W	
R083	1-249-429-11	CARBON	10K	5%	1/4W	
R084	1-249-413-11	CARBON	470	5%	1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R085	1-249-429-11	CARBON	10K	5%	1/4W	
R086	1-249-417-11	CARBON	1K	5%	1/4W	
R087	1-249-417-11	CARBON	1K	5%	1/4W	
R088	1-249-425-11	CARBON	4.7K	5%	1/4W	
R090	1-249-413-11	CARBON	470	5%	1/4W	
R091	1-249-409-11	CARBON	220	5%	1/4W	
R093	1-249-429-11	CARBON	10K	5%	1/4W	
R094	1-249-429-11	CARBON	10K	5%	1/4W	
R095	1-249-409-11	CARBON	220	5%	1/4W	
R096	1-249-409-11	CARBON	220	5%	1/4W	
R097	1-249-429-11	CARBON	10K	5%	1/4W	
R098	1-249-429-11	CARBON	10K	5%	1/4W	
R099	1-215-900-11	METAL OXIDE	22K	5%	2W	F
R251	1-249-417-11	CARBON	1K	5%	1/4W	
R252	1-249-413-11	CARBON	470	5%	1/4W	
R253	1-249-413-11	CARBON	470	5%	1/4W	
R255	1-249-385-11	CARBON	2.2	5%	1/4W	F
R256	1-249-385-11	CARBON	2.2	5%	1/4W	F
R260	1-249-393-11	CARBON	10	5%	1/4W	
R261	1-249-429-11	CARBON	10K	5%	1/4W	
R262	1-249-413-11	CARBON	470	5%	1/4W	
R263	1-249-421-11	CARBON	2.2K	5%	1/4W	
R264	1-249-421-11	CARBON	2.2K	5%	1/4W	
R265	1-249-425-11	CARBON	4.7K	5%	1/4W	
R266	1-249-425-11	CARBON	4.7K	5%	1/4W	
R401	1-249-434-11	CARBON	27K	5%	1/4W	
R402	1-249-435-11	CARBON	33K	5%	1/4W	
R410	1-249-413-11	CARBON	470	5%	1/4W	
R411	1-249-413-11	CARBON	470	5%	1/4W	
R412	1-249-413-11	CARBON	470	5%	1/4W	
R500	1-247-897-11	CARBON	560K	5%	1/4W	
R501	1-249-413-11	CARBON	470	5%	1/4W	
R502	1-249-409-11	CARBON	220	5%	1/4W	
R503	1-249-410-11	CARBON	270	5%	1/4W	
R504	1-215-427-00	METAL	1.8K	1%	1/6W	
R505	1-249-431-11	CARBON	15K	5%	1/4W	
R506	1-249-428-11	CARBON	8.2K	5%	1/4W	
R507	1-247-891-00	CARBON	330K	5%	1/4W	
R509	1-249-424-11	CARBON	3.9K	5%	1/4W	
R510	1-249-426-11	CARBON	5.6K	5%	1/4W	
R511	1-249-429-11	CARBON	10K	5%	1/4W	
R512	1-247-891-00	CARBON	330K	5%	1/4W	
R513	1-249-429-11	CARBON	10K	5%	1/4W	
R514	1-249-409-11	CARBON	220	5%	1/4W	
R515	1-249-423-11	CARBON	3.3K	5%	1/4W	
R516	1-249-408-11	CARBON	180	5%	1/4W	
R517	1-249-429-11	CARBON	10K	5%	1/4W	
R518	1-249-437-11	CARBON	47K	5%	1/4W	
R519	1-249-433-11	CARBON	22K	5%	1/4W	
R520	1-249-411-11	CARBON	330	5%	1/4W	
R521	1-249-405-11	CARBON	100	5%	1/4W	
R522	1-215-469-00	METAL	100K	1%	1/6W	
R523	1-249-417-11	CARBON	1K	5%	1/4W	
R524	1-249-421-11	CARBON	2.2K	5%	1/4W	
R525	1-249-417-11	CARBON	1K	5%	1/4W	
R526	1-249-409-11	CARBON	220	5%	1/4W	F
R527	1-249-431-11	CARBON	15K	5%	1/4W	
R528	1-249-408-11	CARBON	180	5%	1/4W	
R529	1-249-427-11	CARBON	6.8K	5%	1/4W	
R530	1-249-448-11	CARBON	1.2	5%	1/4W	F
R533	1-249-408-11	CARBON	180	5%	1/4W	
R534	1-247-901-11	CARBON	820K	5%	1/4W	
R535	1-249-753-15	CARBON	4.7M	5%	1/4W	
R536	1-249-749-00	CARBON	2.2M	5%	1/4W	
R537	1-249-434-11	CARBON	27K	5%	1/4W	
R538	1-247-883-00	CARBON	150K	5%	1/4W	
R539	1-247-883-00	CARBON	150K	5%	1/4W	
R540	1-249-399-11	CARBON	33	5%	1/4W	
R541	1-249-438-11	CARBON	56K	5%	1/4W	
R542	1-249-425-11	CARBON	4.7K	5%	1/4W	
R543	1-249-451-11	CARBON	2.2	5%	1/4W	
R544	1-247-745-11	CARBON	330	5%	1/2W	
R545	1-249-436-11	CARBON	39K	5%	1/4W	
R546	1-249-434-11	CARBON	27K	5%	1/4W	
R547	1-249-426-11	CARBON	5.6K	5%	1/4W	
R548	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
R549	1-215-890-11	METAL OXIDE	470	5%	2W	F
R550	1-249-440-11	CARBON	82K	5%	1/4W	
R551	1-249-749-00	CARBON	2.2M	5%	1/4W	
R552	1-216-433-00	METAL OXIDE	1.2K	5%	1W	
R553	1-216-869-11	METAL OXIDE	1K	5%	1W	
R554	1-249-411-11	CARBON	330	5%	1/4W	
R555	1-249-749-00	CARBON	2.2M	5%	1/4W	
R556	1-249-405-11	CARBON	100	5%	1/4W	
R557	1-249-425-11	CARBON	4.7K	5%	1/4W	
R558	1-247-895-00	CARBON	470K	5%	1/4W	
R559	1-249-427-11	CARBON	6.8K	5%	1/4W	
R560	1-249-411-11	CARBON	330	5%	1/4W	
R591	1-249-427-11	CARBON	6.8K	5%	1/4W	
R592	1-249-429-11	CARBON	10K	5%	1/4W	
R593	1-249-429-11	CARBON	10K	5%	1/4W	
R594	1-249-424-11	CARBON	3.9K	5%	1/4W	
R595	1-249-417-11	CARBON	1K	5%	1/4W	
R596	1-249-425-11	CARBON	4.7K	5%	1/4W	
R597	1-249-425-11	CARBON	4.7K	5%	1/4W	
R598	1-249-405-11	CARBON	100	5%	1/4W	
R599	1-249-405-11	CARBON	100	5%	1/4W	
R602	1-215-901-00	METAL OXIDE	33K	5%	2W	F
R603	1-216-359-00	METAL OXIDE	6.8	5%	1W	F
R604	1-249-414-11	CARBON	560	5%	1/4W	
R605	1-215-469-00	METAL	100K	1%	1/6W	
R606	1-249-426-11	CARBON	5.6K	5%	1/4W	
R607	1-249-434-11	CARBON	27K	5%	1/4W	
R608	1-215-901-00	METAL OXIDE	33K	5%	2W	F
R609	1-249-401-11	CARBON	47	5%	1/4W	
R610	1-249-393-11	CARBON	10	5%	1/4W	F
R611	1-249-385-11	CARBON	2.2	5%	1/4W	F
R612	1-207-905-00	WIREWOUND	0.27	10%	2W	F
R613	1-249-401-11	CARBON	47	5%	1/4W	
R614	1-205-919-11	WIREWOUND	220	10%	10W	F
R616	1-249-417-11	CARBON	1K	5%	1/4W	
R617	1-249-411-11	CARBON	330	5%	1/4W	
R618	1-216-431-11	METAL OXIDE	560	5%	1W	
R619	1-249-429-11	CARBON	10K	5%	1/4W	
R620	1-249-433-11	CARBON	22K	5%	1/4W	
R621	1-249-431-11	CARBON	15K	5%	1/4W	
R622	1-249-429-11	CARBON	10K	5%	1/4W	
R623	1-249-385-11	CARBON	2.2	5%	1/4W	F
R624	1-249-411-11	CARBON	330	5%	1/4W	
R625	1-215-865-11	METAL OXIDE	220	5%	1W	
R626	1-249-411-11	CARBON	330	5%	1/4W	
R628	1-249-393-11	CARBON	10	5%	1/4W	
R629	1-249-411-11	CARBON	330	5%	1/4W	
R630	1-249-437-11	CARBON	47K	5%	1/4W	
R633	1-249-405-11	CARBON	100	5%	1/4W	
R634	1-216-430-11	METAL OXIDE	390	5%	1W	
R635	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

D **V**

REF.NO.	PART NO.	DESCRIPTION				REMARK
R636	1-249-429-11	CARBON	10K	5%	1/4W	
R642	1-216-343-00	METAL OXIDE	0.33	5%	1W	F
R643	1-217-192-21	WIREWOUND	0.22	10%	2W	F
R647	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R648	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R650	1-249-417-11	CARBON	1K	5%	1/4W	
R651	1-249-405-11	CARBON	100	5%	1/4W	
R652	1-247-903-00	CARBON	1M	5%	1/4W	
R802	1-249-443-11	CARBON	0.47	5%	1/4W	F
R805	1-249-448-11	CARBON	1.2	5%	1/4W	F
R806	1-249-439-11	CARBON	68K	5%	1/4W	
R807	1-216-869-11	METAL OXIDE	1K	5%	1W	
R809	1-202-821-11	SOLID	1.8K	10%	1/2W	
R810	1-202-818-00	SOLID	1K	10%	1/2W	
R811	1-215-863-11	METAL OXIDE	100	5%	1W	
R812	1-249-494-11	CARBON	68K	5%	1/2W	
R815	1-215-884-11	METAL OXIDE	47	5%	2W	F
R816	1-215-868-00	METAL OXIDE	680	5%	1W	
R817	1-249-417-11	CARBON	1K	5%	1/4W	
R820	1-249-403-11	CARBON	68	5%	1/4W	
R821	1-247-725-11	CARBON	10K	5%	1/4W	F
R822	1-217-778-11	FUSIBLE	1K	5%	1W	F
R825	1-216-349-00	METAL OXIDE	1	5%	1W	F
R826	1-249-441-11	CARBON	100K	5%	1/4W	
R827	1-249-429-11	CARBON	10K	5%	1/4W	
R828	1-249-423-11	CARBON	3.3K	5%	1/4W	
R829	1-249-418-11	CARBON	1.2K	5%	1/4W	
R830	1-249-429-11	CARBON	10K	5%	1/4W	
R831	1-249-451-11	CARBON	2.2	5%	1/4W	
R1001	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1002	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1003	1-249-413-11	CARBON	470	5%	1/4W	
R1005	1-249-408-11	CARBON	180	5%	1/4W	
R1006	1-249-408-11	CARBON	180	5%	1/4W	
R1007	1-249-408-11	CARBON	180	5%	1/4W	
R1008	1-249-409-11	CARBON	220	5%	1/4W	
R1009	1-249-417-11	CARBON	1K	5%	1/4W	
R1012	1-249-405-11	CARBON	100	5%	1/4W	
R5501	1-249-429-11	CARBON	10K	5%	1/4W	
R5502	1-249-417-11	CARBON	1K	5%	1/4W	
R5503	1-249-389-11	CARBON	4.7	5%	1/4W	
R5504	1-247-903-00	CARBON	1M	5%	1/4W	
R5505	1-249-393-11	CARBON	10	5%	1/4W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV501	1-228-991-00	RES, ADJ, CARBON 2.2K
RV502	1-228-994-00	RES, ADJ, CARBON 10K
RV601	1-228-991-00	RES, ADJ, CARBON 2.2K

<SPARK GAP>

REF.NO.	PART NO.	DESCRIPTION
SG801	1-519-063-XX	DISCHARGING GAP

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T601 ⚠	1-448-961-31	S.R.T
T602 ⚠	1-424-011-12	TRANSFORMER, PULSE
T801	1-437-090-00	HDT
T802 ⚠	1-439-416-11	TRANSFORMER ASSY, FLYBACK

<TERMINAL PIN>

REF.NO.	PART NO.	DESCRIPTION
TP91	*1-535-084-00	1P TERMINAL PIN

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1347-030-A	V BOARD, COMPLETE *****************	
	*4-380-698-01	CASE (MAIN), SHIELD, A1	
	*4-380-699-01	CASE (UPPER LID), SHIELD, A1	
	*4-382-701-01	CASE (BOTTOM LID), SHIELD, A2	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C01	1-126-101-11	ELECT	100MF	20%	16V
C02	1-124-120-11	ELECT	220MF	20%	16V
C03	1-124-119-00	ELECT	330MF	20%	16V
C04	1-124-477-11	ELECT	47MF	20%	16V
C05	1-126-101-11	ELECT	100MF	20%	16V
C06	1-124-120-11	ELECT	220MF	20%	16V
C07	1-124-499-11	ELECT	1MF	20%	50V
C08	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C09	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C10	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C11	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C12	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C13	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C14	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C15	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C16	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C17	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C18	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C19	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C21	1-163-833-00	CERAMIC CHIP	0.068MF		25V
C24	1-126-101-11	ELECT	100MF	20%	16V
C25	1-124-477-11	ELECT	47MF	20%	16V
C27	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C28	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C29	1-124-927-11	ELECT	4.7MF	20%	50V
C51	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C52	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C53	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C54	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C55	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C56	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C57	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C58	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C59	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CNV03	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
V1	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P
V2	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P
V3	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
V4	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)
V5	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)

<TRIMMER>

REF.NO.	PART NO.	DESCRIPTION
CT01	1-141-392-11	CAP, VAR, TRIMMER (1 GANG)

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D01	8-719-400-47	DIODE MA3056M
D02	8-719-400-95	DIODE MA3130L
D03	8-719-400-18	DIODE MA152WK

REF.NO.	PART NO.	DESCRIPTION	REMARK
D04	8-719-105-52	DIODE RD3.6M-B2	
D07	8-719-400-63	DIODE MA3068M	
D08	8-719-400-63	DIODE MA3068M	
D09	8-719-400-18	DIODE MA152WK	
D10	8-719-400-18	DIODE MA152WK	
D11	8-719-914-44	DIODE DAP202K	
D12	8-719-914-44	DIODE DAP202K	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-972-41	IC MAB8461P-W136	
IC2	8-759-972-96	IC SAA5231-V6	
IC3	8-759-013-21	IC SDA5241	
IC4	8-759-230-68	IC TMM2063P-70	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L01	1-408-411-00	INDUCTOR 15UH	
L02	1-408-407-00	INDUCTOR 6.8UH	
L03	1-408-407-00	INDUCTOR 6.8UH	
L04	1-408-407-00	INDUCTOR 6.8UH	
L05	1-408-407-00	INDUCTOR 6.8UH	
L06	1-408-407-00	INDUCTOR 6.8UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q01	8-729-920-92	TRANSISTOR 2SD2096-EF	
Q02	8-729-807-50	TRANSISTOR 2SD1623-R	
Q03	8-729-900-53	TRANSISTOR DTC114EK	
Q04	8-729-271-22	TRANSISTOR 2SC2712-G	
Q05	8-729-807-50	TRANSISTOR 2SD1623-R	
Q06	8-729-271-22	TRANSISTOR 2SC2712-G	
Q07	8-729-900-98	TRANSISTOR DTC143TK	
Q09	8-729-800-68	TRANSISTOR 2SB815B6	
Q10	8-729-800-68	TRANSISTOR 2SB815B6	
Q11	8-729-800-68	TRANSISTOR 2SB815B6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R01	1-218-326-11	METAL GLAZE 470 1/2W	
R02	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R04	1-218-326-11	METAL GLAZE 470 1/2W	
R05	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R06	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R07	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R08	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R09	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R13	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R14	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R15	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R16	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R17	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R18	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R19	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R20	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R27	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R28	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R29	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R30	1-218-325-11	METAL GLAZE 120 1/4W	
R31	1-218-325-11	METAL GLAZE 120 1/4W	
R32	1-218-325-11	METAL GLAZE 120 1/4W	
R33	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R34	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R37	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R38	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R40	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R41	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R43	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R44	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R45	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R46	1-216-311-00	METAL GLAZE 6.8 5% 1/10W	
R51	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R52	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R53	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R54	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R55	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R56	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R57	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R58	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R59	1-216-056-00	METAL GLAZE 2K 5% 1/10W	
R60	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R61	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R62	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R63	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R64	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R65	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R66	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R67	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R68	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R69	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV01	1-238-009-11	RES, ADJ, CARBON 220	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X01	1-567-162-21	OSCILLATOR, CRYSTAL	
X02	1-567-495-21	OSCILLATOR, CRYSTAL	
X03	1-577-082-11	VIBRATOR, CERAMIC	

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*A-1371-373-A J1 BOARD, COMPLETE
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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1401	1-123-875-11	ELECT 10MF 20% 50V	
C1402	1-126-103-11	ELECT 470MF 20% 16V	
C1403	1-102-112-00	CERAMIC 330PF 10% 50V	
C1404	1-124-902-00	ELECT 0.47MF 20% 50V	
C1405	1-101-003-00	CERAMIC 0.0047MF 50V	
C1406	1-124-902-00	ELECT 0.47MF 20% 50V	
C1407	1-124-477-11	ELECT 47MF 20% 16V	
C1408	1-126-101-11	ELECT 100MF 20% 16V	
C1409	1-126-233-11	ELECT 22MF 20% 50V	
C1410	1-123-875-11	ELECT 10MF 20% 50V	
C1411	1-123-875-11	ELECT 10MF 20% 50V	
C1412	1-124-477-11	ELECT 47MF 20% 16V	
C1413	1-124-477-11	ELECT 47MF 20% 16V	
C1414	1-123-875-11	ELECT 10MF 20% 50V	
C1415	1-124-902-00	ELECT 0.47MF 20% 50V	
C1416	1-124-902-00	ELECT 0.47MF 20% 50V	
C1417	1-124-120-11	ELECT 220MF 20% 16V	
C1418	1-102-112-00	CERAMIC 330PF 10% 50V	
C1419	1-102-112-00	CERAMIC 330PF 10% 50V	
C1421	1-124-477-11	ELECT 47MF 20% 16V	
C1423	1-106-375-12	MYLAR 0.022MF 10% 250V	

J1

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1424	1-106-375-12	MYLAR	0.022MF	10%	250V
C1425	1-124-902-00	ELECT	0.47MF	20%	50V
C1426	1-124-902-00	ELECT	0.47MF	20%	50V
C1427	1-101-003-00	CERAMIC	0.0047MF		50V
C1428	1-101-003-00	CERAMIC	0.0047MF		50V
C1429	1-101-003-00	CERAMIC	0.0047MF		50V
C1430	1-102-112-00	CERAMIC	330PF	10%	50V
C1431	1-124-902-00	ELECT	0.47MF	20%	50V
C1432	1-124-902-00	ELECT	0.47MF	20%	50V
C1433	1-126-101-11	ELECT	100MF	20%	16V
C1436	1-102-074-00	CERAMIC	0.001MF	10%	50V
C1437	1-102-074-00	CERAMIC	0.001MF	10%	50V
C1501	1-123-875-11	ELECT	10MF	20%	50V
C1502	1-123-875-11	ELECT	10MF	20%	50V
C1503	1-108-614-11	MYLAR	0.001MF	10%	100V
C1504	1-124-910-11	ELECT	47MF	20%	50V
C1505	1-106-383-00	MYLAR	0.047MF	10%	100V
C1507	1-108-620-11	MYLAR	0.0033MF	10%	100V
C1508	1-123-875-11	ELECT	10MF	20%	50V
C1509	1-124-499-11	ELECT	1MF	20%	50V
C1511	1-123-875-11	ELECT	10MF	20%	50V
C1512	1-106-363-00	MYLAR	0.0068MF	10%	400V
C1513	1-102-963-00	CERAMIC	33PF	5%	50V
C1514	1-106-353-00	MYLAR	0.027MF	10%	250V
C1515	1-102-117-00	CERAMIC	820PF	10%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN1401	1-536-996-11	TERMINAL BOARD, INPUT/OUTPUT
CN1402	1-561-534-41	SOCKET 21P
CN1403	1-561-534-41	SOCKET 21P
CNJ25	*1-564-892-41	PLUG, CONNECTOR 3P
CNJ41	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P
CNJ43	*1-564-893-11	PLUG, CONNECTOR 4P
CNJ45	*1-564-894-11	PLUG, CONNECTOR 5P
CNJ51	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P
CNJ67	*1-560-721-21	PLUG, CONNECTOR 2P
CNJ142	*1-564-893-11	PLUG, CONNECTOR 4P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1401	8-719-110-04	DIODE RD7.5ES-B3
D1403	8-719-110-04	DIODE RD7.5ES-B3
D1404	8-719-110-04	DIODE RD7.5ES-B3
D1405	8-719-110-04	DIODE RD7.5ES-B3
D1406	8-719-110-04	DIODE RD7.5ES-B3
D1407	8-719-110-18	DIODE RD10ES-B3
D1408	8-719-110-14	DIODE RD9.1ES-B3
D1409	8-719-110-04	DIODE RD7.5ES-B3
D1410	8-719-110-04	DIODE RD7.5ES-B3
D1415	8-719-110-04	DIODE RD7.5ES-B3
D1418	8-719-110-04	DIODE RD7.5ES-B3
D1419	8-719-110-04	DIODE RD7.5ES-B3
D1420	8-719-110-04	DIODE RD7.5ES-B3
D1501	8-719-912-20	DIODE 1SS120
D1502	8-719-911-19	DIODE 1SS119
D1503	8-719-911-19	DIODE 1SS119
D1504	8-719-911-19	DIODE 1SS119
D1505	8-719-000-12	DIODE MC931
D1506	8-719-110-85	DIODE RD36ES-B4
D1507	8-719-911-19	DIODE 1SS119

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1401	8-752-032-27	IC CXA1114P
IC1402	8-759-946-32	IC TEA2014A
IC1501	8-759-942-16	IC TEA2031A

<COIL>

REF.NO.	PART NO.	DESCRIPTION
L1401	1-412-043-11	INDUCTOR, WIDE BAND
L1402	1-412-043-11	INDUCTOR, WIDE BAND

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q1401	8-729-173-38	TRANSISTOR 2SA733-K
Q1402	8-729-173-38	TRANSISTOR 2SA733-K

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1401	1-249-404-00	CARBON	82	5%	1/4W	
R1402	1-247-698-11	CARBON	68	5%	1/4W	
R1403	1-249-437-11	CARBON	47K	5%	1/4W	
R1404	1-249-413-11	CARBON	470	5%	1/4W	
R1405	1-249-429-11	CARBON	10K	5%	1/4W	
R1407	1-247-895-00	CARBON	470K	5%	1/4W	
R1408	1-249-434-11	CARBON	27K	5%	1/4W	
R1409	1-249-413-11	CARBON	470	5%	1/4W	
R1410	1-249-434-11	CARBON	27K	5%	1/4W	
R1411	1-249-413-11	CARBON	470	5%	1/4W	
R1412	1-249-437-11	CARBON	47K	5%	1/4W	
R1413	1-247-895-00	CARBON	470K	5%	1/4W	
R1414	1-249-437-11	CARBON	47K	5%	1/4W	
R1415	1-249-434-11	CARBON	27K	5%	1/4W	
R1416	1-249-434-11	CARBON	27K	5%	1/4W	
R1417	1-249-404-00	CARBON	82	5%	1/4W	
R1418	1-247-738-11	CARBON	82	5%	1/2W	F
R1419	1-249-409-11	CARBON	220	5%	1/4W	
R1420	1-249-409-11	CARBON	220	5%	1/4W	
R1422	1-249-417-11	CARBON	1K	5%	1/4W	
R1423	1-249-434-11	CARBON	27K	5%	1/4W	
R1424	1-249-434-11	CARBON	27K	5%	1/4W	
R1425	1-249-417-11	CARBON	1K	5%	1/4W	
R1426	1-249-417-11	CARBON	1K	5%	1/4W	
R1427	1-249-417-11	CARBON	1K	5%	1/4W	
R1428	1-247-895-00	CARBON	470K	5%	1/4W	
R1429	1-247-895-00	CARBON	470K	5%	1/4W	
R1430	1-247-699-11	METAL	82	5%	1/4W	
R1433	1-249-409-11	CARBON	220	5%	1/4W	
R1434	1-249-393-11	CARBON	10	5%	1/4W	F
R1437	1-249-429-11	CARBON	10K	5%	1/4W	
R1440	1-249-415-11	CARBON	680	5%	1/4W	
R1441	1-249-415-11	CARBON	680	5%	1/4W	
R1442	1-249-437-11	CARBON	47K	5%	1/4W	
R1443	1-249-437-11	CARBON	47K	5%	1/4W	
R1444	1-249-409-11	CARBON	220	5%	1/4W	
R1445	1-249-440-11	CARBON	82K	5%	1/4W	
R1447	1-249-409-11	CARBON	220	5%	1/4W	
R1448	1-249-409-11	CARBON	220	5%	1/4W	
R1452	1-249-412-11	CARBON	390	5%	1/4W	
R1453	1-249-412-11	CARBON	390	5%	1/4W	
R1454	1-247-703-11	METAL	180	5%	1/4W	
R1455	1-247-703-11	METAL	180	5%	1/4W	
R1456	1-249-405-11	CARBON	100	5%	1/4W	
R1501	1-249-433-11	CARBON	22K	5%	1/4W	
R1502	1-249-434-11	CARBON	27K	5%	1/4W	
R1503	1-247-895-00	CARBON	470K	5%	1/4W	
R1504	1-249-435-11	CARBON	33K	5%	1/4W	
R1505	1-249-433-11	CARBON	22K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1506	1-247-895-00	CARBON	470K	5%	1/4W	
R1509	1-247-887-00	CARBON	220K	5%	1/4W	
R1510	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1511	1-249-417-11	CARBON	1K	5%	1/4W	
R1512	1-249-429-11	CARBON	10K	5%	1/4W	
R1513	1-249-438-11	CARBON	56K	5%	1/4W	
R1514	1-249-417-11	CARBON	1K	5%	1/4W	
R1515	1-247-899-11	CARBON	680K	5%	1/4W	
R1516	1-249-432-11	CARBON	18K	5%	1/4W	
R1517	1-249-410-11	CARBON	270	5%	1/4W	
R1518	1-249-429-11	CARBON	10K	5%	1/4W	
R1519	1-247-883-00	CARBON	150K	5%	1/4W	
R1520	1-247-895-00	CARBON	470K	5%	1/4W	
R1521	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1556	1-249-426-11	CARBON	5.6K	5%	1/4W	

<VARIABLE RESISTOR>

RV1501	1-238-023-11	RES, ADJ, CARBON	470K
RV1502	1-228-994-00	RES, ADJ, CARBON	10K
RV1503	1-238-017-11	RES, ADJ, CARBON	22K
RV1504	1-238-012-11	RES, ADJ, CARBON	1K
RV1505	1-238-023-11	RES, ADJ, CARBON	470K
RV1506	1-238-017-11	RES, ADJ, CARBON	22K
RV1507	1-238-009-11	RES, ADJ, CARBON	220
RV1508	1-238-016-11	RES, ADJ, CARBON	10K
RV1509	1-228-999-00	RES, ADJ, CARBON	470K

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*1-629-783-21 J2 BOARD
****

<CAPACITOR>

C1401	1-126-105-11	ELECT	1000MF	20%	35V
C1402	1-126-105-11	ELECT	1000MF	20%	35V

<CONNECTOR>

CNJ23	*1-564-893-11	PLUG, CONNECTOR 4P
CNJ242	*1-564-893-11	PLUG, CONNECTOR 4P

<JACK>

J1401	1-507-806-00	JACK

<RESISTOR>

R1401	1-247-708-11	CARBON	470	5%	1/4W
R1402	1-247-708-11	CARBON	470	5%	1/4W

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*1-629-785-21 H3 BOARD
****

<CONNECTOR>

CNH302	*1-564-898-11	PLUG, CONNECTOR 9P
CNH303	*1-564-892-41	PLUG, CONNECTOR 3P

<DIODE>

D1405	8-719-812-41	DIODE TLR124
	*4-348-208-00	HOLDER, LED; D1405

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S1401	1-571-085-21	SWITCH, TACTICLE	
S1402	1-571-085-21	SWITCH, TACTICLE	
S1403	1-571-085-21	SWITCH, TACTICLE	
S1404	1-571-085-21	SWITCH, TACTICLE	
S1405	1-571-085-21	SWITCH, TACTICLE	
S1406	1-571-085-21	SWITCH, TACTICLE	
S1407	1-571-085-21	SWITCH, TACTICLE	
S1408	1-571-085-21	SWITCH, TACTICLE	
S1409	1-571-085-21	SWITCH, TACTICLE	
S1410	1-571-085-21	SWITCH, TACTICLE	
S1411	1-571-085-21	SWITCH, TACTICLE	
S1412	1-571-085-21	SWITCH, TACTICLE	
S1414	1-571-085-21	SWITCH, TACTICLE	

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*1-629-786-21 H4 BOARD
****

*4-374-987-01	GUIDE, LIGHT
*4-388-955-01	BRACKET (B), LIGHT GUIDE

<CONNECTOR>

CNH401	*1-564-884-11	PLUG, CONNECTOR 7P
CNH403	*1-564-880-31	PLUG, CONNECTOR 3P

<DIODE>

D1401	8-719-948-31	DIODE LD-201VR
	*4-387-825-01	HOLDER, LED; D1401
D1402	8-719-948-31	DIODE LD-201VR
	*4-387-825-01	HOLDER, LED; D1402
D1403	8-719-948-31	DIODE LD-201VR
	*4-387-825-01	HOLDER, LED; D1403
D1404	8-719-948-31	DIODE LD-201VR

<IC>

IC1401	8-741-138-70	IC BX-1387
IC1401	8-749-901-33	IC SBX1483-11

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*1-629-781-21 KS BOARD
****

<CAPACITOR>

C202	1-124-902-00	ELECT	0.47MF	20%	50V
C203	1-124-477-11	ELECT	47MF	20%	16V
C204	1-124-902-00	ELECT	0.47MF	20%	50V
C205	1-124-927-11	ELECT	4.7MF	20%	50V
C206	1-124-477-11	ELECT	47MF	20%	16V
C207	1-124-927-11	ELECT	4.7MF	20%	50V
C213	1-126-233-11	ELECT	22MF	20%	50V
C214	1-106-363-00	MYLAR	0.0068MF	10%	400V
C217	1-106-363-00	MYLAR	0.0068MF	10%	400V
C218	1-106-375-12	MYLAR	0.022MF	10%	250V
C219	1-106-375-12	MYLAR	0.022MF	10%	250V
C220	1-108-620-11	MYLAR	0.0033MF	10%	100V
C221	1-108-620-11	MYLAR	0.0033MF	10%	100V
C222	1-106-375-12	MYLAR	0.022MF	10%	250V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
C223	1-106-375-12	MYLAR	0.022MF	10%	250V	
C224	1-106-367-00	MYLAR	0.01MF	10%	400V	
C225	1-136-173-00	FILM	0.47MF	5%	50V	
C226	1-136-173-00	FILM	0.47MF	5%	50V	
C227	1-106-375-12	MYLAR	0.022MF	10%	250V	
C228	1-106-379-12	MYLAR	0.033MF	10%	250V	
C229	1-106-371-00	MYLAR	0.015MF	10%	400V	
C230	1-106-371-00	MYLAR	0.015MF	10%	400V	
C231	1-124-902-00	ELECT	0.47MF	20%	50V	
C232	1-123-875-11	ELECT	10MF	20%	50V	
C233	1-102-114-00	CERAMIC	470PF	10%	50V	
C234	1-102-114-00	CERAMIC	470PF	10%	50V	
C235	1-102-114-00	CERAMIC	470PF	10%	50V	
C236	1-102-114-00	CERAMIC	470PF	10%	50V	
C237	1-124-902-00	ELECT	0.47MF	20%	50V	
C238	1-102-978-00	CERAMIC	220PF	5%	50V	
C239	1-126-103-11	ELECT	470MF	20%	16V	

<CONNECTOR>

CNK21	*1-562-370-21	CONNECTOR, BOARD TO BOARD 18P
CNK25	*1-564-880-31	PLUG, CONNECTOR 3P

<DIODE>

D201	8-719-110-14	DIODE RD9.1ES-B3
D202	8-719-110-14	DIODE RD9.1ES-B3
D205	8-719-110-04	DIODE RD7.5ES-B3
D206	8-719-110-04	DIODE RD7.5ES-B3

<IC>

IC201	8-759-013-17	IC TDA6200

<TRANSISTOR>

Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R201	1-249-441-11	CARBON	100K	5%	1/4W	
R202	1-249-425-11	CARBON	4.7K	5%	1/4W	
R203	1-249-441-11	CARBON	100K	5%	1/4W	
R204	1-249-435-11	CARBON	33K	5%	1/4W	
R205	1-249-435-11	CARBON	33K	5%	1/4W	
R206	1-249-423-11	CARBON	3.3K	5%	1/4W	
R207	1-249-423-11	CARBON	3.3K	5%	1/4W	
R208	1-249-431-11	CARBON	15K	5%	1/4W	
R209	1-249-433-11	CARBON	22K	5%	1/4W	
R210	1-249-431-11	CARBON	15K	5%	1/4W	
R211	1-249-441-11	CARBON	100K	5%	1/4W	
R212	1-249-433-11	CARBON	22K	5%	1/4W	
R213	1-249-431-11	CARBON	15K	5%	1/4W	
R214	1-249-417-11	CARBON	1K	5%	1/4W	
R215	1-249-433-11	CARBON	22K	5%	1/4W	
R216	1-249-433-11	CARBON	22K	5%	1/4W	
R217	1-249-431-11	CARBON	15K	5%	1/4W	
R218	1-249-417-11	CARBON	1K	5%	1/4W	
R219	1-249-429-11	CARBON	10K	5%	1/4W	
R220	1-249-425-11	CARBON	4.7K	5%	1/4W	
R221	1-249-417-11	CARBON	1K	5%	1/4W	
R222	1-249-417-11	CARBON	1K	5%	1/4W	
R223	1-249-413-11	CARBON	470	5%	1/4W	
R224	1-249-413-11	CARBON	470	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R227	1-249-417-11	CARBON	1K	5%	1/4W	
R228	1-249-417-11	CARBON	1K	5%	1/4W	
R229	1-249-441-11	CARBON	100K	5%	1/4W	
R230	1-249-441-11	CARBON	100K	5%	1/4W	
R231	1-249-437-11	CARBON	47K	5%	1/4W	
R232	1-249-437-11	CARBON	47K	5%	1/4W	

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MISCELLANEOUS
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	⚠.1-451-295-31	DEFLECTION YOKE (Y21PFA2)
	1-452-032-00	MAGNET, DISK; 10MMϕ
	1-452-094-00	MAGNET, RPTATABLE DISK; 15MMϕ
	1-452-277-00	MAGNET, BMC
	1-503-642-41	SPEAKER
	1-574-565-11	CORD (WITH PLUG)
	⚠.1-559-346-12	CORD, POWER (WITH CONNECTOR)
L901	⚠.1-426-383-11	COIL, DEMAGNETIZATION
V901	⚠.8-738-753-05	PICTURE TUBE (A51JUH60X)

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ACCESSORIES AND PACKING MATERIALS
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PART NO.	DESCRIPTION	REMARK
A-1470-844-A	COMMANDER ASSY (RM-673)	
3-750-032-51	MANUAL, INSTRUCTION	
*4-377-015-01	BAG, PROTECTION	
*4-387-852-02	CUSHION (UPPER) (ASSY)	
*4-387-853-03	CUSHION (LOWER) (ASSY)	
*4-387-854-01	INDIVIDUAL CARTON	

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9-964-244-01

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TV Group

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